international journal of health education

Problems of health education in the Americas

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Three weeks in two Libyan villages

The value of various forms of publicity

In rural areas: documentaries or feature films ?

VOL. III No 3 JULY 1960

Wise decisions

Public health education seeks to translate what science knows about physical, mental and social well-being into wise individual and community practices. It helps people, individually and in groups, to help themselves to better health, through gaining a desire for health, discovering their personal, family, occupational, and community health problems, acquiring essential knowledge, and, with appropriate use of consultation and community resources, taking needed action.

Clair E. TURNER, Chief Advisor, IUHEP
(Extract from an address presented at the 16th Annual Meeting, American Medical Writers' Association, St. Louis, USA)

If the citizens of our communities are incapable of making wise decisions in public health matters, then the answer does not lie in the direction of increased authoritarianism on our part. It lies rather in the direction of developing better technics for getting our ideas across and a more widespread acceptance, on our part, of the importance of the social science approach to community public health problems. To do this will take time and application, on the part of all concerned and, perhaps, first of all, it will require more general recognition by public officials of the knowledge and interest in public affairs already available to help them in their work—if they will only look for it among the people of their communities!

It is interesting to note that industry has found it economically desirable to engage in consumer studies in order to determine some of the factors involved in public acceptance of its products—especially the reasons why there are differences in attitude toward a given product. If it is economically sound for industry to spend money in order to better understand its consumers' motives, is not this also true of public health?

Julius S. PRINCE, Chief Public Health Advisor, US Point IV Programme, Ethiopia
(Extract from an article on "A public philosophy in public health" published in the "American Journal of Public Health")

The photographs appearing in this issue have been kindly placed at our disposal by the World Health Organization: page 114 (Maxime Rude, Mexico); page 121 (Vatican Museum, Rome); 123; 124 (Musée de l'Assistance publique, Paris); 125 (Bibliothèque Nationale, Paris); 126 (Genoa Museum); 128 (City Health Department, Durban); 133 (The Philippines); by Amin Khalil: 136; and by the Christie Hospital & Holt Radium Institute, Manchester, England: 142.

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Health education's responsibility in the malaria eradication campaign: attract voluntary collaborators; stimulate every person to report febrile cases

Problems of health

This brilliant synthesis of major public health problems in the Americas —malaria, water shortage, malnutrition, leprosy and tuberculosis— vividly points to the tremendous responsibility health education has to fulfill in each of these areas. A responsibility calling for an education of the people which will preserve their cultures and respect their traditions, making of health education " part of a movement of spiritual development that has human dignity as its permanent goal ".

In considering the present trend of health education in the Americas I should like to analyze two fundamental questions.

Is the present scope of health education of the public enough to fulfill the purposes of health programs and, therefore, of the assistance rendered by international organizations? Are the present methods of this discipline successful in creating the concern of each person for the health and

This paper was delivered at the Annual Meeting of the American National Council for Health Education of the Public, 23 June 1960, Philadelphia, Penn., USA.

welfare of himself and those close to him? I hope to show, through concrete examples of programs sponsored by the Pan American Health Organization and the World Health Organization in this Continent, that we need a careful review of our present trend in order to make health education " one of the fundamental public health methods that assist in achieving the goals of a public health program." (1)

I believe that today, more than ever, an active participation of individuals, groups and communities is needed, if we want to diminish the gap between scientific achievements and their application and consequent social progress. We feel that a state of human complacency is interfering with the extension of knowledge and sound experience for the well being of people. It goes without saying that we are speaking of cultures where on the whole there are no beliefs, traditions or superstitions that will prevent people from benefiting from the new methods that science provides. The more the risk of death and disease diminishes the greater the indifference of large groups of individuals. One gets the impression that a sense of false security has invaded them and that only a wave of terror, coming from an outbreak, for instance, could awaken them to reality, unless through adequate education we create the responsible attitudes that will move them to the proper decisions. We realize the difficulties of this task because " all people are unique personalities with different wants, different capabilities, unique backgrounds of experiences, different understandings of language. Therefore, we must know the people with whom we are working." (2)

I wonder whether throughout the world health workers do really know the groups, the communities and their cultural patterns in the places where they are endeavoring to apply their knowledge to serve the people.

I should like to present some of the programs of the Pan American Health Organization and the World Health Organization in the Americas that reveal the acute need for better health education of the public, based more on social and behavioral sciences than at present.

Let us consider first the malaria eradication campaign, a major activity of our Organization. There are still 83 million people in the Americas exposed to the risk of malaria. After the concept of eradication as a real possibility was accepted by both the PAHO in 1954 and WHO in 1955, a progressive and exacting program has been developed in this Continent by the Governments with the assistance of ICA, UNICEF and our Organization. Today, in all the countries where the disease is prevalent, action towards eradication is being developed. The results vary according to the magnitude of the problem, the organization and administration of the campaign, the stage of the operations and the quality and quantity of problems encountered. Considered as a whole, the campaign has been successful. The number of cases and deaths has diminished substantially. Today hardly a case of malaria can be seen in the large cities of Latin America. Furthermore,

h education in the Americas

there are some areas of the Continent where the disease has been completely eradicated. In our opinion, it is also an expression of success that problems which interfere with the progress of the operation have been clearly differentiated in the countries. I refer particularly to the resistance of mosquitoes to insecticides. We feel certain that through research these problems will be solved in due time so that eradication will have a new final impetus.

Some figures show the magnitude of this human enterprise. The disease is present in 29 countries and territories, and the malarious area in them includes a population of 87 million people. In 1959, Governments invested almost 23 million dollars in anti-malaria campaigns and the international organizations, over 11 million dollars. 16,242 full time national workers are engaged in malaria eradication throughout the countries and 115 international consultants are advising them.

A silent prayer

An essential part of a program of this nature is a permanent search for cases in order to determine whether or not transmission of the disease has been interrupted through spraying of houses, treatment of cases and other measures. In this region of the world the so-called passive case finding, performed by voluntary collaborators, has been largely tried. This system operates through the collection of blood smears from all persons with fever or recent history of fever, and the administration of antimalaria drugs under specified conditions. The collaborators are very often plain lay people with an inner desire to serve who, adequately trained and properly supervised, perform the duties already mentioned. Based on the results of the blood smears these volunteers collect, the epidemiologist is in the position to trace the existence or transmission of the disease within the malarious area. The larger the network of collaborators the better the appraisal of the movement of the disease in the community. In Mexico, Guatemala and Honduras, to mention a few countries, several thousands of these community volunteers are helping successfully to find patients and to give them appropriate treatment. In other countries, results have not been so satisfactory.

Here is a concrete example of the importance of education of the community with the dual purpose of attracting the greatest possible number of voluntary collaborators and of stimulating every person to report the febrile cases in due time.

I quote from Dr. Gaylord Anderson (referring to the 87th Meeting of the American Public Health Association last year), " Last evening at the international dinner, as I saw the United States make

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Dr Abraham Horwitz is the Director of the Pan American Sanitary Bureau, operating arm of the Pan American Health Organization and Regional Office for the Americas of the World Health Organization.

Dr Horwitz was born in Santiago, Chile and received his M. D. degree from the University of Chile in 1936. After a brilliant career as a University professor and medical officer he decided to « go back to school », this time in the United States, at Johns Hopkins University where he was granted the degree of Master of Public Health in 1944. Since 1950 Dr Horwitz has served on the staff of the Pan American Sanitary Bureau, first in the Division of Public Health, then in the Bureau Zone Office in Lima and finally as Chief of the Professional Education Branch.

In April 1953 he returned to Chile to accept appointment as Director of the School of Public Health of the University of Chile. In 1954 he was appointed Assistant Director of the National Health Service of Chile. In December 1957 he accepted the additional post of Professor of Preventive Medicine at the University of Chile. In 1958 he was elected to the post of PASB Director by the representatives of the 21 American Republics, at the XV Pan American Sanitary Conference.

gifts of three million dollars to the World Health Organization to aid in its malaria control program and two million to the Pan American Health Organization, I conjured up visions of what might be accomplished thereby. I had visions also of regulation, some of it possibly distasteful to some persons, and I uttered a silent prayer that in development of this program those responsible would not forget the need for educating the public so that such measures would be accepted and that through this education the people of these areas would be prepared to continue such measures after the special grant funds are exhausted." (3) Having been one of the persons involved in that occasion, I hope that these prayers will come true.

A gift of God?

The water problem in Latin America is another which calls for extensive participation of individuals and communities. Motivation should not be difficult. Who could question the importance of water for health and at the same time for industrial, agricultural and economic development? Nevertheless, in 19 countries in Latin America, 29 million persons or 39% of the urban population were still without water from a piped community supply in 1958. In smaller cities in the urban group, that is, those with 2,000 to 10,000 inhabitants, 70% are without water service. At least as large a proportion of 107,000,000 people living in smaller communities and rural areas are probably without water in their homes Thus is estimated that 100 million persons in Latin America need a safe water supply.

The belief that water is a Godsent element has produced the present situation whereby people do not pay for the cost of the services and Governments are unable to invest the capital needed to provide them. Communities must be helped to develop a new attitude with regard to this problem, based on the conviction that without joint efforts the present shocking shortage of water will be still further aggravated by the rapid increase of the population. Through education people must be brought face to face with the responsibility for their own health. Governments in turn should incorporate water developments in their economic programs and consider long-term and low-interest credits from the international market of capital for this purpose. WHO and PAHO are assisting the countries in technical, administrative, legal and financial measures which will progressively meet this need.

Here again is another case where health education of the public has a tremendous responsibility to fulfill, barely touched as yet. It is not exactly a problem of motivating individuals and groups but rather of persuading them that the only solution lies in their active participation in the programs. The magnitude of the enterprise should not discourage Governments to approach the problem through sound planning and efficient services.

The perfect solution, if . . .

The Hon. Christian Herter, US Secretary of State, has said he regards INCAPARINA as one of the outstanding scientific achievements of the Americas, in the fight against malnutrition and infant mortality. The occasion was the celebration of Pan American Day, on 14 April 1960, at a special session of the Council of the Organization of American States. As you may know, INCAPARINA is a protein vegetable mixture in the form of a flour developed at the Institute of Nutrition of Central America and Panama (INCAP), a regional organization sponsored by the Governments and the PAHO. Field trials in Guatemala have shown that it has a nutritive value similar to milk. It can be added to " atole ", a popular beverage

in Guatemala, and in that way has been very well accepted by children. At present, industrial production of INCAPARINA is being organized so that large enough quantities may become available. However, assurance is needed that the different communities where this product is the natural solution to the problem of malnutrition will react favorably to it and that mothers will acquire the habit of giving it regularly to their children.

To reach these and many other desired goals the delicate process of education must be undertaken.

Liberated from fear

No longer need lepers be cast out of society. Segregation colonies can now be replaced by out-patient and domiciliary treatment. With the use of sulphones, experience has proved that the disease is not easily transmitted. This is a marvelous example of how science has brightened the future of human beings liberating them from fear, prejudice and superstition. These new methods are being applied progressively throughout the world where leprosy is prevalent and offer a definite possibility for control of the disease. But to be successful, the patient and his hopes must be understood and supported; also a firm resolution should exist to carry on the treatment even though it might last several years. Again health education is the key. Patients, families and communities should be carefully prepared to prevent each house where there is a case being shunned as a leprosarium.

A development of a similar nature has occurred in tuberculosis. With the extensive use of isoniazide and para amino salicylic acid it has been shown that minimal and moderately advanced forms can be safely treated at home and that infection through family contacts can be prevented. Careful observations in Madras prove that domiciliary chemotherapy compares favorably with sanatorium care. As in the case of leprosy, chronicity of tuberculosis calls for a prolonged period of treatment of the patient and of chemoprophylaxis for the contacts. If it is to be successful, the organization of a program of this sort calls for careful preparation of the community and this can only be done through proper health education.

The use of Salk vaccine for the prevention of poliomyelitis comes to our mind as another example of a similar situation. Even though it has had great influence in reducing the incidence of the disease in the United States, the fact remains that there were 6,000 cases last year in this country and that many persons have not been vaccinated at all or were not properly vaccinated. To justify this peculiar behavior one is led to believe that people are no longer afraid of paralysis. The vaccine is on hand and when well administered prevents the disease in a great majority of persons. Nevertheless, it is not being used as it should. As a result, it may be necessary to develop a research program in health education to know and combat the reasons for this attitude.

We need to review the present trend

Examples similar to the above drawn from all fields of public health could be multiplied. Instances can be cited where a program has succeeded because of effective education, whereas a similar one, in a different environment, fails because of ineffective education, i.e., one that has not produced enough participation of people, both as individuals and groups to help themselves attain better health. In Latin America lack of participation is certainly the most common. I dare to assume that the same situation prevails in the great majority of countries of the world. If " we measure health education

by what happens to people rather than the amount of materials used and distributed," (4) I believe that we need to review the present trend of this fundamental discipline in order to incorporate it effectively in major programs underway.

Speaking of health education horizons in Latin America before this distinguished Council, Dr. Carlos Luis Gonzalez, Assistant Director of the Pan American Sanitary Bureau said: "I firmly believe that we cannot state that we have planned and carried out our health education responsibilities until we can truthfully say that every contact with the public health service, at every level, constitutes a positive educational experience for every individual, one in which both the public health worker and the person receiving the service share a learning experience which leads them toward the state of physical, emotional, and mental wellbeing which we see as our goal." (5)

To this end all members of the health team should take part in the educational processes, during the planning phase as well as throughout the whole operation of programs. The professional health educator has today a definite role to play as a permanent advisor on methods and techniques of education. Gone are the days when his whole activity was based on audio-visual procedures or, in general, in mass communication media. Today, he is supposed to be near the people, in person or through the health team, in order to know and understand them better, if he really expects to contribute to their welfare through modifications of individual attitudes and cultural patterns.

There is an increased recognition of this philosophy in Latin America through the efforts of PAHO, WHO and ICA. Health educators from many countries are being trained in greater numbers in the United States and courses in this discipline have been developed in several schools of public health in Latin America in recent years. However, I feel that more emphasis should be given in their programs to the social and behavioral sciences and especially to social psychology in order to prepare them more fully to know the mores of the people and the cultural environment in which they will work. But, health educators alone, no matter how well experienced they are, collaborating with a team that does not vibrate with the same philosophy, that does not believe in the same principles and, therefore, does not practice education in every activity, cannot display their knowledge in an effective manner. It has become absolutely essential, therefore, to extend

(Continued page 131)

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(1) WHO—A12/Technical Discussions/5, Rev. 1—Twelfth World Health Assembly—Report of the Technical Discussions at the Twelfth World Health Assembly—*Health Education of the Public*, page 11.

(2) WHO—A12/Technical Discussions/5, Rev. 1—Twelfth World Health Assembly—Report of the Technical Discussions at the Twelfth World Health Assembly—*Health Education of the Public*, page 9.

(3) Gaylord W. Anderson, M.D., Dr. P.H., F.A.P.H.A.—Journal of Public Health, February 1960, Vol. 50, No. 2—*Health Education—A One-World Challenge*, page 129.

(4) Dr. W. Emrys Davies, Headmaster, Yew Tree Secondary School, Wythenshawe, Manchester, England—WHO, A12/Technical Discussions/5, Rev. 1—Twelfth World Health Assembly—Report of the Technical Discussions at the Twelfth World Health Assembly—*Health Education of the Public*, page 8.

(5) Dr. Carlos Luis Gonzalez, Assistant Director, PASB—International Journal of Health Education, October 1959, Vol. II, No. 4—*Health Education Horizons in Latin America*, page 195.

Operation Zacatepec

"Operation Zacatepec" is the name given to a series of studies undertaken by the Group for Research on Infantile Malnutrition at the Rural Research Centre of Mexico's Hospital for Children, to determine the factors which influence the nutrition level of a community. The following study deals with "the popular concept of the cause of communicable disease". It illustrates brilliantly how important it is to uncover people's beliefs and attitudes in health matters and presents an imaginative and useful scheme for the classification of people's concepts, whether they belong to the II Century A.D. or to the XX Century.

by
Joaquin
Cravioto

The efforts made to improve the health conditions of the populations living in countries called technically underdeveloped, have been based on two different conceptions of the problem. On the one hand, there is a tendency to consider that the solution lies in having sufficient technical personnel plus adequate equipment and supplies, as the individuals concerned will surely be willing and even anxious to accept the proposed innovations which have evident scientific value. The other approach recognizes that everyone has his own beliefs and practices regarding health and disease which are not all bad. Some of these customs, based on tests of trial and error conducted for centuries, undoubtedly have a positive value; many others are harmful and quite a number may be considered innocuous. The main thing is to understand that there exist various doctrines of health and disease among the people; that the health workers are not working in a void which is only waiting to be filled with science; and that, together with the doctrines, there exists a staff of local practitioners who maintain the established systems in use.

If we agree that the value of all knowledge resides in the changes such knowledge is able to produce in the individual, and its influence on the individual's behaviour in the community, then the problem—considered under the second approach—becomes one of re-education. This must inevitably start with apprenticeship, on the part of the health technician, in the health and disease concepts and, resulting practices prevalent in his area of work, even if these do not seem to correspond to anything that could be called scientific.

A good number of studies on the concept of disease and its cause have been published in journals of anthropology. Usually, these studies concern groups of natives who have remained more or less isolated due to various reasons, such as the lack of communications or their native language. The ideas these groups have are a mixture of ancient beliefs, medical concepts brought by Spanish people, and

a superimposed Christian beliefs on ancient pagan rites. To them, life is ruled by several hostile forces (adverse spirits) who are found everywhere, and are always ready to cause illness or death, even without the least provocation (1, 2, 3, 4).

Magic and science: the same root

However important these studies may be, it is necessary to consider that only a very small portion of the population in Mexico is composed of pure native Indians and that these studies are fundamentally of a descriptive nature. When, exceptionally, they include a classification of the causes of disease, this is presented from the ethnological viewpoint and centered, fundamentally, around the concepts which have a high degree of magic, tuch as : " Loss of the Soul ", " Introduccion of objects and spirits ", " Witchcraft ", " Violation of Food Taboos ", etc. (5). These studies imply that all knowledge which is not magic has apparently a logical origin, since many beliefs do not correspond to what is considered today as truly scientific.

In this connection, it is worth while remembering that magic and science come from the same mental root—the need to find rules and explanations for everything that exists and surrounds us. But while

Until the Vth Century B.C.: the causes of disease were considered as supernatural

the cosmic principles of the magic mentality are based on fancy, those formulated by the scientist are based on experience. The fundamental difference between magic and science lies in the value given to experience; the primitive mentality being refractory to the principle of contradiction, is impermeable to experience. Any modification in the attitude of the individual may only be obtained through a very slow effort of the spirit of criticism, acting through the centuries. Thus, through a lengthy process of differentiation, science and magic become distinct from one another (6).

Joaquin Cravioto was born in Mexico. He graduated in December 1945 from the Army Medical School of Mexico and obtained his Master's Degree in Public Health (Pediatrics research and educational hospitals) at the University of Illinois, USA. His deep interest in children and nutrition led him to undertake further studies in these fields—with special emphasis on metabolic deficiencies in children—at the Department of Pediatrics of the University of New York, and at the Sloan Kettering Institute for Cancer Research. He then became a special research fellow on biochemistry of nutrition, at the University of Gothenburg, Sweden, 1954-1955. On return home, he was appointed " Investigator " for Infantile Malnutrition at the Department of Nutrition and Endocrinology of the Children's Hospital of Mexico. He is Associate Professor of Nutrition at the Army Medical School and at the School of Public Health. He has taken leave of absence from the Group Research on Infantile Malnutrition at the Children's Hospital, to join the staff of the Food and Agriculture Organization as Nutrition Officer.

His hobbies—in no way related to his professional interests—are swimming and hiking.

If magic and science are collective mental functions in the evolution of all the people, it is possible to postulate, at least as a working hypothesis, the existence of several stages in the concept of the cause of disease—stages which go from a purely magical knowledge to the modern scientific attitude—and to determine the stage of this historic evolution to which the communities belong at the moment of their study.

How can we classify people's knowledge

The works of Gordon on the evolution of the epidemiology of health led us to draw up an evaluation scheme of the concept of the cause of communicable disease, based on the five diseases reported as chief causes of death among Mexican children during the last 10 years.

The information was obtained from 52 persons, among which 33 were interviewed by college graduates from the Army Medical School of Mexico, as part of their training in preventive medicine. Four of the interviewed were children hospitalized for tuberculosis and nine were relatives of patients admitted for treatment of pulmonary tuberculosis, at the Hospital Infantil de México (8).

Each person was interviewed on the following subjects: Identification of Disease, Etiologic Agent, Frequency, Prevalence, Susceptibility, Communicability, Period of Contagiousness, Prognosis, Complications, Treatment, and Prophylaxis. All the questions were asked so that they were easily understood and would not influence the answers given by the interviewees.

Evaluation. Gordon points out that throughout history, it may be seen that man's way of thinking has always been very good, and that a certain number of reasonable hypotheses have been formulated to explain both the source and the evolution of disease.

It seems logical to consider that the concept of the cause of disease which existed in a community at a given moment could not be more advanced than the theories of the scientific leaders of those days. For example, the most educated people who lived in Europe during the Vth Century, B.C., could only have ideas as advanced as those of Hippocrates and his School.

If we take into account the main ideas expressed during the historical development of the concept of communicable disease, schematically, the following nine stages may be outlined:

STAGE I — Up to the V Century, B.C.
— Supernatural causes

STAGE II — V Century, B.C.
— Natural causes
— Causes lying outside the individual
— Causes disturbing the normal constituents of the organism
— Health is a balance among the properties of the body, the atmosphere, and the environment
— Diseases may be differentiated from one another

STAGE III — II Century, A.D.
— Fatigue, dietary transgressions, emotions, extremes of cold and heat, induce the presence of diseases
— The stars also have an influence

STAGE IV — XIV Century
— Diseases are divided into contagious and non-contagious
— The isolation of suspicious cases avoids the spread of contagious diseases (quarantine)

STAGE V — XVI and XVII Centuries
— The cause of disease is an entity that arises by spontaneous generation
— Diseases "go" from sick to healthy individuals

— They are also transmitted by inanimate objects, such as clothes and household utensils (fomites)
— A great number of animals of different species are victims of diseases similar to those of man
— A relation exists between occupation and frequency of disease
— Transmission of disease by arthropods, such as fleas; there are two mechanisms for transmission: (1) through the bite of the arthropod, and (2) mechanical transmission

STAGE VI — XVII Century

— The disease does not affect all individuals as severely; some forms are so mild that only laboratory examinations can reveal them; in other instances, the disease is so serious, and the signs so apparent, that the patient dies rapidly
— An epidemic disease disappears, then another comes
— Quarantine and isolation are the only way to control infections

STAGE VII — XVIII Century

— Diseases "come" because there is something that brings them without being able to explain just what it is and only knowing that "it" comes from outside the individual
— The "specific" causes of communicable diseases are found in the atmospheric miasma
— Association of disease with personal filthiness, uncleanliness of the community, faulty drainage, foul odors, pests, and general uncleanliness; the control of water, milk and other foods is necessary to avoid disease
— There is practically no transmission from person to person

STAGE VIII — XIX Century

— Living microscopic organisms are the cause of contagious disease
— Disease is not caused by general filthiness; it is a specific infection
— Specific agents are bacteria, protozoa, viruses, rickettsia, metazoa, yeasts, and fungi
— There exist individuals who carry germs without necessarily being ill (healthy carriers)
— The different responses of exposed individuals to the same infectious agent are explained by immunologic factors
— Some infectious diseases may be prevented by vaccination

STAGE IX — XX Century

— Some diseases are spread by discharges of the respiratory tract

XIth Century: under the leadership of the Arabs progress was made in discovering the causes of disease

XIVth Century: the isolation of suspicious cases avoided the spread of infection

— Some diseases are spread by discharges of the digestive apparatus
— Some diseases are spread by direct contact
— Some diseases originate in animal reservoirs
— The influence attributed to the climate, the sun, the atmosphere, and the soil, is explained by the effect these phenomena have on vectors

From Hippocrates to Pasteur

Since the purpose of this work is not to determine the concept of communicable disease in the persons interviewed, but only to offer an evaluation scheme, Table No. 1 was drawn up to show the frequency of the answers corresponding to each stage for each disease considered.

The greatest number of answers received corresponded to Stage V, followed by Stages III, IV, and VI; the least frequent were Stages I and II. As regards the largest percentage per disease, this varied with each one; for example for diarrhoea, dysentery and pneumonia, it corresponded to Stage III, whereas for malaria and tuberculosis, the maximum was found under Stage V.

Actually, the answers given by each family ranged from Stage I to Stage IX. Let us illustrate this with the answers given by a member of family 1-OZ :

Diarrhoea: " This disease obeys supernatural as well as natural causes, lying outside the individual. Health is a balance between the properties of the body the atmosphere, and the environment. Dietary excesses favor the presence of diseases which are not contagious."

These concepts correspond to Stages I, II, III, and IV.

Dysentery: " This disease results from natural causes lying outside the individual;

Table No. 1

Frequency of answers for each one of the main stages

Disease	Stages								
	I	II	III	IV	V	VI	VII	VIII	IX
Diarrhoea	1	7	31	26	14	20	29	23	3
Dysentery	0	6	29	24	18	17	23	19	6
Pneumonia	1	1	36	25	14	1	3	7	6
Malaria	0	1	12	23	46	0	6	8	14
Tuberculosis	0	5	28	23	66	36	23	41	35

Table No. 2

Example of answers found on investigating the popular concept of diarrhoea

Stage	Answers
I	" Diarrhoea is caused by heat in the blood ' or fright."
II	" One may the stomach inherit looseness of; it may also be caused from sitting on cold things : the hip and buttocks absorb the cold and that provokes diarrhoea."
III	" It has many causes : food in bad conditions; an emotion, a fright or vexation; also vermins."
IV	" To be contagious, it depends on the disease producing it; when it is caused by some microbe in the intestine, it is contagious; when it is by nerves, it is not contagious."
V	" It is transmitted by using the same dishes where the patient ate and by flies who stop on the filth and then on food, carrying the microbe."
VI	" The disease in some cases is serious; it produces dehydration, specially in children. They die from dehydration."
VII	" It is more frequent in the open fields because there are no facilities to wash hands; there are no latrines, there is much dirt and the wind blows dust that pollutes food."
VIII	" This disease is produced by fruits that are not washed or boiled, and which contain some little animals that may cause it."
IX	" It is frequent during warm weather, as there are more means of contamination due to the larger number of flies."

dietary excesses or extremes of cold and heat condition the presentation of the disease; although it is found associated with personal filthiness, it is not caused by general filthiness; it is a specific infection, but its cause has not been investigated."

These concepts were classified in Stages II, III, VII, and VIII.

Malaria: " Extremes of cold and heat condition the presentation of the disease;

XVIIth Century: the cause of disease is an entity that arises by spontaneous generation

it is transmitted by arthropods who pass it from sick to healthy individuals. The disease is also associated with personal filthiness, and in some cases, it is caused by specific agents (metazoa)."

Here the interviewees' concepts belong to Stages III, V, VII, and VIII.

Pneumonia: " Extremes of cold and heat condition the presentation of the disease which is not contagious." These concepts correspond to Stages III and IV.

Tuberculosis: " It is a contagious disease resulting from natural causes, it is transmitted by fomites, and is spread by discharges from the respiratory tract; fatigue conditions the presentation of the disease."

These concepts correspond to Stages II, III, IV, V, and IX.

In conclusion, it may be seen that, according to the disease considered, the interviewee 1-OZ presents concepts ranging from Stage I (supernatural causes) to Stage IX (spread by discharges from the respiratory apparatus). Ideas classified in Stage III (fatigue, food excesses, and extremes of cold and heat) are common

to all diseases investigated. It must be noted that in no answer did the concept of microbe appear as a cause of disease.

We must know what they know

Any programme aiming at the prophylaxy of communicable diseases requires, first of all, a real and conscious cooperation from the people concerned; otherwise the most optimistic results can only be a transient decrease in the spread of infection. In the field of education, it is fundamental to recognize that there is no transference of skill or knowledge and that a similarity of purposes between the person to be educated and the educator must be established. First the educator must discover what are the beliefs and practices of those he wants to educate and take these into consideration when planning his programme.

The public health worker is constantly confronted with the fact that, although practically everybody wishes to enjoy health and well-being, variable portions of the population do not pay attention to the advice they are offered to protect, promote, or improve their health and well-being. The constantly growing desire of health workers to reach that non-cooperative group has resulted in a considerable increase in the number of studies on the factors influencing people's behaviour.

Efforts now tend to concentrate on methods which may incite people who are markedly adverse or indifferent to make up their minds and take measures to protect their health and well-being.

Such techniques, however, while they are successful with individuals who already hold certain beliefs, have no influence on the others. When performing a study as part of a campaign against pulmonary tuberculosis, Hochbaum (10) found that the people who did not think they could

XIXth Century: microscopic living organisms are the cause of communicable diseases; some can be prevented by vaccination

contract tuberculosis did not see any point in submitting to chest examination. If such a person had symptoms of tuberculosis, he would attribute them to something else or would not pay any attention to them until they really became serious. But even when people believe in the possibility of contracting tuberculosis, many among those who feel well and have no symptoms will not have an X-ray as they are convinced they cannot be harbouring a serious disease. They will only resort to X-rays when they have symptoms which they consider as belonging to that disease. Finally, there are people who will not have an X-ray because they fear the diagnosis of a contagious disease, which they consider as a social problem meaning disaster and loss of prestige for them and their families; and this fear is greater than any logical consideration of the benefits derived from early diagnosis and rehabilitation.

This study illustrates how important it is to uncover people's beliefs and attitudes in health matters.

Lewis (12) has stressed this point most effectively. In the first place, this knowledge can help in establishing good relations between the doctor and the patient. In every type of society, the patient has always sought to be understood by his physician. If the latter is able to give scientific advice without producing conflicts with the cultural pattern of the patient, there is a chance, then, that such advice is put into practice.

If it is possible, historically and sociologically, to determine that the principle of contradiction has no value in communities with magic trends and that experience, far from eliminating such magic beliefs only supports them, re-education programmes have to give priority to this factor and planning must aim at making these communities accept contradiction—a fundamental modifier of knowledge which will speed up the differentiation between magic and science.

Conclusion

(1) Presentation is made of an evaluation scheme of the concept of communicable diseases, based on the fact that magic and science are mental collective functions having a common origin, and that experience and the acceptance of the principle of contradiction have resulted, with the centuries, in the differentiation of the two concepts.

(2) It is considered that there are nine main stages which may be differentiated from each other, and that the concepts expressed by the individuals may be classified within these stages.

(3) Answers for each stage are presented; these show that the same individual may have advanced ideas of the XX Century together with very primitive ideas from the II Century A.D., and even V Century B.C.

(4) The evaluation of the concept of disease and its classification according the stages where it belongs, are necessary to establish any programme for the prophylaxis or eradication of a disease.

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(1) Foster, G. M.: *Nagualias in Mexico and Guatemala.* Acta Americana 2:85, 1944.

(2) Rodríguez Rivera de Mendoza, V.: *Pérdida de la Sombra y Levantamiento del Espíritu.* Almanaque de Previsión y Seguridad, Monterrey, México, 259, 1954.

(3) Foster, G. M.: *Relationships Between Spanish and Spanish American Folk Medicine.* J. of Am. Folklore, 66:201, 1953.

(4) García Manzanedo, H. y de García, G. C.: *El Chaneque en el Folklore y en la Salud.* América Indígena, 19:151, 1959.

(5) Mak, C.: *Mixte Medical Beliefs and Practices.* América Indígena, 19:125, 1959.

(6) Caso, A.: *Sociología.* 9a. Edición. Libreros Mexicanos Unidos. México, 261, 1958.

(7) Cravioto, J. et al.: *Operación Zacatepec VI,* Concepto de Salud y Enfermedad en una Comunidad del México Rural. Datos no publicados.

(8) Rivera, L.: *Concepto y Ensayo de Sistematización del Estudio Económico Social de Familias Afectadas por Tuberculosis.* Tesis. Escuela de Trabajo Social. S.E. P. México, D.F. 1959.

(9) Gordon. J. E.: *Evolution of an Epidemiology of Health.* Health Education Council Publ. New York, 1953.

(10) Hochbaum, G. M.: *Public Participation in Medical Screening Programs.* Public Health Service Publication No. 572. Superintendent of Documents. U. S. Government Printing Office Washington, D.C.

(11) Clements, F. W.: *Report of an International Seminar on Education in Health and Nutrition* F.A.O. Nutrit. Meeting Rep. Ser. No. 13, Rome, Italy, 1956.

(12) Lewis, O.: *Village Life in Northern India.* University of Illinois Press., Urbana U.S.A., 1958.

The culprit was the dirty bottle: shock tactics, associating dirty bottles and coffins, were used to win the battle against infant mortality

Bury the bottle, Mother, not the baby

"Detribalization" and "Impact of industrialization on underdeveloped peoples" are often referred to in scientific treatises. Concrete examples are seldom given. Here is an example: the disuse of breast feeding among African workers in Natal, its consequences and what was done to deal with the situation, through health education.

by Joan Goddard

For years, a highly trained health education unit of Municipal Bantu lecturers had worked the Bantu areas of Durban city, South Africa. Films had been made with a Bantu cast, based on the pattern of African life in the city; African traditions, in customs and taboos were woven into the narration which was always given "live" in the Zulu idiom. A daylight cinema van was the mobile instructional venue. The cinema was very popular; lecturers were saluted as "our brother"; crowds never failed to answer the loudspeaker invitation to "come and learn about something which concerns you and your family". Tens of thousands came, saw and heard.

The small coffins

And yet, there was something very wrong for, in spite of free municipal family clinics in their very midst and health education programmes day and night, there followed the slow tread of mourners behind small "bokisi" (coffins) to the cemetery; and the cause was gastro-enteritis.

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We didn't believe the renegade fly accounted for all the trouble; in any case anti-fly spraying was carried out on a colossal scale by the municipality throughout the areas regularly.

Bantu lecturers become home visitors

No! there was some other cause. The suspect was baby feeding bottles. Instead of showing films on the village squares, Bantu lecturers were briefed to go forth, examine bottles and teast since, alas! breast feeding had gone out of fashion with Bantu mothers.

They returned from their daily investigations with mounting proof that there was a definite link between "stinking" bottles, as they called them, and sick infants. They said: "Find a bad bottle and you will surely find a baby suffering from diarrhoea and vomiting, and a mother who will declare that she knew the bottle reeked but thought that it didn't matter!" "Does the child like its bottle?" she would be asked. "Oh no, no, it never wants to take its food" . . . "Would you like to eat from anything smelling like this?" . . .

At this point statistics are interesting:

At the Cato Manor Sub-areas:

Out of 17 bottle-fed babies at Msimbini,
13 were sick, all bottles filthy;

Out of 30 bottle-fed babies at Cabazini,
26 were sick, all bottles filthy;

Out of 15 bottle-fed babies at Matatiele,
13 were sick, all bottles filthy;

Out 16 bottle-fed babies at Benoni,
16 were sick, all bottles filthy.

At a Municipal housing scheme it was not much better:

Out of 28 bottle-fed,
27 were sick—all bottles filthy;

Out of 31 bottle-fed,
19 were sick—all bottles filthy;

Out of 58 bottle-fed,
32 were sick—all bottles filthy.

Observation and questioning showed that mothers were deplorably casual about the cleansing of bottles, some sent young children to the tap to let the water run through the bottle for a moment or two; some poured hot water through; some cleaned it with sand—shack sand, most probably highly infected with bacteria because of insanitary habits. Dirty bottles were everywhere lying on the ground, often cheek by jowl with a rubbish heap; flies on the teats and stale feeds sweating in the bottle in the sun.

Rock rabbits

All this called for education a well-p anned health education programme based not only on statistics but on an analysis of the real motivations behind this problem. Thenceforth, for weeks, the daylight cinema van could be seen in shack areas, its interior transformed and used as a demonstration platform a Bantu lecturer standing on it, behind a table with utensils for cleaning. Before demonstration, the Bantu lecturer exhorted the crowd: "You mothers . . . if you don't want your children to follow those other little coffins to the cemetery, watch and learn every detail of the bottle cleaning . . . ask questions, discuss, argue if you like, but stop being rock rabbits" (an allusion to the allegory that the rock rabbit has no tail because he was too lazy to fetch his when tails were being given out).

During the survey lecturers came upon such incidents as these:

(*a*) A mother, enjoying her isishimuyana (strong home-made liquor) was troubled that the baby on her back cried continuously: she gave it a long drink of the mixture to stupefy it;

(*b*) A sick child was crying: it was suffering from bowel trouble; the Municipal free clinic was nearby but the mother

elected to administer an enema of isishimuyana on the advice of her neighbours as it was alleged that it was a cure for green diarrhoea.

The survey also yielded these unsuspected facts:

(i) Breast-fed babies were deplorably in the minority:
Out of 115 babies in a zone, 2 were breast-fed
Out of 180 babies in a zone, 3 were breast-fed
Out of 145 babies in a zone, 1 was breast-fed
Out of 139 babies in a zone, 4 were breast-fed
This ratio was representative of the entire area.

(ii) A very small proportion of the women attended the free Municipal clinic in their midst:
Out of 57 mothers in a zone, 4 only attended;
Out of 115 mothers in a zone, 3 only attended;
Out of 117 mothers in a zone, 12 only attended;
Out of 180 mothers in a zone, 50 only attended.

The moment of truth

Bantu lecturers, who had worked with these people daily for years, can read in their eyes—their evasions, their subterfuges, and their truth—as in a book; what is more, they are on such friendly terms with them that they unmask any dishonesties and press for the truth till at last it is yielded—often with a smile, as if to say "you health folk win". Incidentally, it is that measure of friendliness that made it possible to carry out successfully this education project.

When therefore, they were questioned as to why they didn't attend the clinic with baby, women shrugged their shoulders and ultimately acknowledged (1) "I'm always going to do it tomorrow"... (2) "I'm too busy with my brew, I can't lose customers"... (3) "I went once, months ago, but I couldn't go again"... (4) "I'm angry with the child because the man who gave it to me ran away and now the child spoils my chances of another lover".

In that revealing moment of truth the women could not look the lecturers in the face and say "the clinic is too far"—it being in their midst. Or, "it costs too much"—it being free; so when pressed with the refusal of the invitation, like the age-old story "they all with one consent began to make excuses."

On the question of bottle feeding it was the same. They had been taught that breast-fed infants were not so susceptible to infection as the bottle-fed; that breast feeding was the ideal way of starting a baby on the path of life. Why then were they abandoning the practice?

Excuses included:

1. "I don't want to look like a mother: I want to look like a young girl then I can get another man." (Common reason).
2. "It is too much of a nuisance to me: I can't enjoy my *social* (with nuance) engagements."
3. "I go to work certain days"... "But you could give morning and night feeds"... "A ngi katali" (I couldn't care).

She didn't care because she didn't fully realise the dramatic implications her attitude might have on the health of her baby. Sickness, in her mind, was not linked with the "stinking" bottle. It just happened. So why should she change?

Shock tactics and practical demonstrations

A year later, after an intensive health education drive against dirty bottles the mortality rate for infants under 1 year had dropped 39%. The fight against the un-

clean bottle had been waged with unremitting tenacity day and night—literally night.

For teaching purposes a film was made. The momentary response was encouraging but the change-over to cleanliness too lethargic. Mothers appeared to be habituated to the stench of filthy bottles and their disastrous effects on infants. New shock techniques had to be employed. Additional visual aids were obviously needed. Accordingly, a shock picture of a dehydrated, malnourished baby, mutely suffering, mounted in a bottle-shaped frame was used by the lecturers. For the loudspeaker van, a larger visual piece was made: a small coffin, in the lid of which was inserted the picture of a very ill baby. A button switched on a light which brought the picture into sharp relief. When this was exhibited, silence fell on the chattering women. When the lid was removed from the coffin, a feeding bottle was seen in the casket, crystal clean on one side: filthy on the other. Then the slogan was used: " Bury the Bottle, Mother, Not the Baby ".

To follow up this dramatic moment with something practical, a *demonstration of washing bottles* was always given from the theatre of the loudspeaker van, with rapier like commentary. It was common to harvest numbers of filthy bottles from every audience as a pledge from the mothers that they would begin afresh. The teaching covered: (*a*) breast-feeding versus bottle feeding; (*b*) dirty bottles in relation to gastroenteritis; (*c*) flies on nipples: how they carry disease; (*d*) the guilt of mothers who habitually delay taking a child to the clinic when it commences to pass loose stools.

Fathercraft

Years ago we discovered that Bantu fathers must also be the target for all health principles to be woven into the fabric of family life, the mystery of bottle feeding hygiene included. This meant night sessions in housing schemes, shack areas and the like. The daylight cinema van was floodlit for the purpose. Fathers were desperately serious about this bottle feeding business; some even declared they would, in future, be personally responsible for these domesticities. And everywhere lively discussions were enormously enjoyed by fathers and lecturers.

Problems of health education in the Americas

(Continued from page 119)

the teaching of this discipline to the undergraduate period in all the professional schools so that graduates will have " an educational outlook " in the performance of their day-to-day responsibilities in society. We are far from this ideal in Latin America.

By its very nature, health education needs the personal contact, the human relations to create the behavior in people which will lead them to take care of their own health and that of those close to them. In essence, health education becomes part of a movement of spiritual development that has human dignity as its permanent goal. However, health is not an end in itself; we do not live only to be healthy. I believe that one of the greatest tasks of our time is the preservation of cultures, with due respect to the way of living and traditions of all peoples and with full confidence in the supreme values of humanistic ethics. To this end, health education and, therefore, all organizations devoted to its advancement, can make a major contribution.

School health education in the Philippines does not aim at providing children with academic knowledge only. Its main concern is to plan classroom activities around the people's health needs and to meet personal, home and community problems. Actual life situations are the core of the classroom health teaching and a community school service programme, recently inaugurated, provides a channel for children's enthusiastic desire to tackle health problems.

The community is their best textbook

by Luisa A. Alvarez

The Philippine community schools are a vital force in the community. Aside from their primary responsibility of shaping the country's educational destiny, the schools are among the many governmental agencies involved in moulding our health, social, political, and economic life. In this article, I would like to discuss the role of the schools in the betterment of health through improved school health education.

In the past, the essentials of the school health education program have been discussed in workshops, seminars, and other work-conferences. To restate these essentials they are as follows: healthful school living, health services and guidance, health instruction, and community service. In the Philippines, the schools accept it as a primary responsibility to operate a functional health education program and to cooperate fully with the various agencies and institutions of the community that seek to create a healthful living for the people. The schools share with the home and the community the responsibility of meeting the health needs not only of school children but of the adults. However, it is only through teamwork or synchronization of functions of the different health and welfare agencies that the school children and people of the community can be helped to attain optimum physical, mental, and social well-being.

Healthful school living

A healthful environment is basically essential to good health. As such, all school administrators, school health personnel, and teachers work cooperatively in providing and maintaining a wholesome school living which includes safe, sanitary, attractive, and healthful classrooms, buildings, grounds, lunch-counters, and health

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facilities and equipments. Special attention is given to healthy lighting, ventilation, seating, water supply, waste disposal, drainage, cleanliness, removal of accident hazards, and food sanitation. The school environment where children live, learn, play, and grow is made conducive to cheerfulness and happy living.

Health services and guidance

The Bureau of Public Schools operates a functional health services and guidance program. It has in its services 33 school physicians, 279 dentists, 30 division supervisors of health education, and 449 teacher-nurses. This present school health personnel, however, is sadly inadequate in number, considering the current enrolment of about 4,000,000 school children which is roughly estimated as one-fifth of the population of this country. Efforts are, nevertheless, exerted in rendering maximum health services to children and teachers within the capability of the present undermanned but efficient staff.

To reduce incidence of communicable diseases, teacher-nurses and school physicians cooperate with the Bureau of Health Services personnel of the Department of Health in giving required immunizations. Readmissions after illness are carefully checked to ensure the school protection from communicable diseases that may be spread by school children who return to school before they are well. Isolation procedures are generally applied in the classrooms to remove from the group children who show signs or symptoms of communicable diseases.

The Bureau of Public Schools requires the yearly X-ray or fluoroscopic and medical examination of all public school teachers and other school employees.

Health instruction

The Revised Educational Program of the Philippines' schools which took effect

Getting the children interested in the health needs of the community...

two years ago, prescribed a separate period for health and science in the elementary grades—40 minutes for Grades I through IV and 50 minutes for Grades V and VI. In the secondary schools, health is offered two days a week in all the years, except to the Third and Fourth year boys, where it is taught once a week.

The present opportunity to study health with science in the elementary grades has given considerable impetus and color to health education. Unlike a few years back, when health was just integrated with social studies and teaching was in most instances merely incidental and

practically nil, the current program ensures a more solid and stronger health foundation for the growing children in the lower grades. Health teaching, which is primarily based on the interests, needs, and abilities of children, is now more effective, meaningful, and functional.

Real health problems, the core of teaching

To make it a better part of living, teaching and learning are geared to meeting personal, home, and community health needs and specific situations. Teachers find it more necessary than ever before to have broader insight and first-hand knowledge of their pupils, the homes they come from, and the communities they live in. They deem it essential to study the intellectual abilities of the pupils, their mental and emotional adjustments, and their health needs and interests.

Teachers feel it of paramount importance, too, to develop wholesome relationships with parents to enable them to learn what the parents do for the health of the children, and what opportunities exist at home and in the community for healthful practices. Knowledge of home and community health problems places the teachers in a better position to slant their classroom teaching to meeting such needs. *Real health problems and actual life situations thus serve as the core for classroom health teaching.*

Community health aspects and conditions, such as those related to environmental hygiene, control of communicable disease, water supply, beautification, nutrition, safety, etc., are outstanding contemporary health problems which call for first-hand analysis, careful study, and appropriate solutions. As such, teachers, teacher-nurses, and students undertake community surveys for the purpose of discovering community health needs and problems and utilizing these as basis for classroom instruction in health. Resources and teaching units based on these community needs and conditions are prepared by teachers, in the form of workshops and work-conferences, to supplement, enrich, and reinforce the available teaching guides in health.

Teaching methods and tools for learning are made varied to meet satisfactorily the demands of life-centered and community-centered education. Such techniques as surveys, field trips, resource visitors, demonstrations, visual aids, documentary materials, work experience, and service projects are variably used to good advantage to bridge the span between the school and the community. Painstaking efforts are directed towards *drawing classroom activities closer to the peoples' health needs* through a balanced approach to community services. The community school reaches out into the community, using it as a functional laboratory, and draws the various community groups into an integrated health program dedicated to the general welfare or common weal.

Community service

The health conditions in most of our rural communities a few years back were considered far from satisfactory. Home sanitation was deplorable. Many of the houses were without fences and stray animals were free to roam in the streets and in public places. There were no garbage receptacles, and the disposal of rubbish was sadly inadequate. Drainage was poor. Stagnant pools and mudholes which were favorable breeding places of flies and mosquitos were found everywhere. Spitting and littering in street corners and open public places were rampant. These are not only unhealthful habits but also contrary to principles of good breeding. Such deplorable conditions gave rise to

high mortality and incidence rates from diseases which might otherwise have been prevented through improved home and community living conditions. Tuberculosis alone, of which indiscriminate spitting is considered as one of the biggest factors, takes a yearly toll of about 35,000 lives among our people.

To cooperate with the Department of Health, and meet satisfactorily these community needs and problems, the Bureau of Public Schools has instituted a community school service program and has made classroom teaching more responsive and more sensitive to human and community needs.

Teachers visit the homes for the purpose of improving unwholesome conditions which are a threat to health and life itself. They study community resources, materials, and problems to serve as basis for classroom teaching. Community undertakings, such as toilet construction, community sanitation, and beautification are being undertaken as part of pupils' learning through work experiences. Teachers organize *puroks* in the community and stimulate these community organizations to positive and dynamic action in improving the different areas of community living through self-help.

The vigorous campaign of the community schools for better community living has brought about significant achievements in community health and sanitation, and a richer and fuller living for the people. The progress in home toilet construction and general environmental sanitation has been particularly encouraging. Today there are more than 1,800,000 homes with sanitary toilets, and homes with wholesome surroundings have reached more than the two and one-half million mark. Yet, in 1950, there were only 9,800 homes with sanitary toilets and 8,989 with wholesome surroundings. Garbage receptacles strategically placed in the streets and plazas are now a common sight in many localities.

In most of the rural communities today, the majority of the homes and premises which prior to the inception of the community school service program were eyesores—unkept and insanitary—are now beautifully fenced, clear, and attractive.

The progress within eight years time is indeed commendable.

Hommage to Lucien Viborel

On the occasion of the XIIIth World Health Assembly held in Geneva last May, Dr. J. Anouti, Public Health Director for Lebanon, declared :

" I would like to evoke the memory of Lucien Viborel ... He was one of the most illustrious educators in the social and health fields, a great pioneer of the battle waged to prevent social scourges, one of the first to launch the TB stamp and also to organise the educational campaign for BCG. For a long time to come, we will mourn the loss of Lucien Viborel. He leaves a great void in the health world for he was not only active in his country but in the area of international cooperation. May I express my sincere condolences to his family and to the International Union for Health Education of the Public, who had in him until the end a remarkable Secretary General, as well as to the World Health Organization, who counted Lucien Viborel among the members of its panels of experts."

Before going to the villages, the students practised casting a pit privy slab at the Institute

Three weeks

In September 1958 two teams of students from the Institute of Sanitarians and Health Assistants of Benghazi went out to two villages in the neighbourhood of the capital of Libya. The teams were expected to carry out a health project which was one phase of a comprehensive programme in their field training. The two villages of Gawarsha and Benina, including the Sidi Khalifa area, were chosen as fields of operation.

The teams went out with a plan in hand and with the intention of carrying out this plan in three weeks. The teams made two different approaches. In Gawarsha the work was a success, while in Benina it turned out to be a complete failure, resulting in the withdrawal of the team from the village on the tenth day.

Two approaches

What were the two approaches which accounted for success in one village and failure in another?

Before I discuss the approaches made, it might be useful to define the major sanitary problems. Seen through the eyes of the sanitary engineer of the organisation which undertook this phase of training, the problems were those connected with refuse and sewage disposal. He suggested a plan of work which might be summarised as follows:

— The students should organise a general cleanliness campaign in each village;
— work out a refuse collection and disposal system suitable to village conditions, for possible adoption in the future by villages;
— demonstrate the construction of a pit privy to teach people and stimulate them to build privies inside their premises as a measure to solve the problem of defecation in the open fields.

This programme was handed over to the team leaders for implementation.

According to this plan, it was obvious that the students would be working with the people in the villages. They could thus put into practice the theories they had learned concerning the techniques of working with people.

One team went to Gawarsha, the other to Benina. Both villages were about 15 miles from Benghazi, and each consisted of a quite homogeneous group of people. The leader of the team in Benina was a sanitarian by profession, while the leader of the team in Gawarsha was a health education specialist, who was assigned

ks in two Libyan villages

For the doubting Thomasses, there could be no better proof—but it required a bold decision. This is the story of two teams of sanitarian students who were both given, as part of their training, a similar health project to carry out, under similar conditions. *But* they were to use opposite methods of approach. One met with success. The other failed. What better way indeed to prove that the principles taught in the classroom are valid in the field?

by Amin Khalil

this task partly because no qualified sanitarian was available when the project started and partly because the approach needed the skill of a health educator—in the first stage—more than it needed the skill of a sanitarian.

The two teams made two different approaches to serve the purposes of comparison. The team at Benina ignored the people's interests and culture; while the team at Gawarsha considered the people, their interests and their culture.

What were the achievements?

The value of these two approaches is evidenced in the achievements of each team.

In Benina there was no favourable reaction on the part of the people. The team did not succeed in carrying out any of its functions. When failing to secure the co-operation of the residents in the cleanliness campaign suggested in the plan, the team hired trucks and twelve labourers to do the cleaning job, and in six days the cost of cleaning this small village amounted to £450. It was evident that this cleaning procedure was impracticable because the villages could not afford it. The team was unable to carry out any other feature on the suggested programme.

The other team at Gawarsha carried out all the aspects of the programme with utmost success. The general cleanliness campaign as well as the refuse collection and disposal system were not undertaken as separate schemes but as part of a big fly-control campaign in which the people

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Amin Khalil, a Graduate of the American University of Beyrouth decided last year to specialise in health education. He had developed this wish over six years, while accumulating experience in the planning and organization of health education programmes and in the teaching of this basic branch of public health to health students and workers, both in his home country, Jordan, and abroad. His major assignments were with the United Nations Work and Relief Agency for Palestine Arab Refugees and with the Libyan Ministry of Health.

To implement his decision, Amin Khalil went to London University and just as we were going to press, we learnt that he had brilliantly passed his examinations " with distinction ". May we wish him " all the very best " on the eve of his new career as a Health Education Specialist.

were much interested. Before the campaign was over, the team arranged to spray those houses which were clean enough to merit the spraying; and 97% of the houses were sprayed. Only 2% of the houses were not clean enough and 1% were not sprayed because the house-owners were not in the house at the time. The model pit privy was constructed in the mosque yard by the residents under technical guidance from the team members.

Achieving this success the students did not limit their activities to the originally planned programme. They were encouraged by the team leader to meet the needs of the people who began to come to the team asking for guidance and assistance. Many a shop owner came to seek help on how to eradicate the rodents in his shop; others came to seek advice on where best to locate the latrine they wanted to construct. Most impressive of all was the request of school teachers to help in working out a health education programme for all grades. In addition to this, a simple and safe water supply scheme for the school was suggested and a plan worked out. The people were ready to contribute but unfortunately the team did not stay in the village long enough to see whether this scheme was put into operation.

The relations between the team and the people were well-built. The team members worked co-operatively and with but little interference from their leader they organised their work, and divided themselves into sub-groups to carry out different functions whenever they felt it necessary.

Now these were briefly the achievements of the two teams. The two different approaches in the two similar villages can account for the striking success in Gawarsha and the complete failure in Benina.

Two cultural factors

Among the multiple factors which combined to achieve success in one community and failure in the other, culture played a definite role. I will point out only two features of the people's culture which in my opinion affected the programme.

A most significant feature is that in most of their daily practices they are guided by their religion—Islam. Religious leaders are held in high esteem.

In Gawarsha the team made a successful approach to the problems of constructing a model pit privy by linking the question of defecation in the open field and the holy " Hadith " of the Prophet. The Hadith says " Avoid three cursed habits : defecation in the shades, in the roads and in water sources ". The religious leader " Iman ", at the prayer ceremony on Friday, tactfully brought this Hadith to the attention of the people, urged them to comply with the Prophet's advice and to build privies in their premises utilizing the services of the health team present at the time in the village.

The Iman took the second step and allowed the team to construct the pit privy within the compounds of the mosque. He personnally helped in digging the pit and all the people of the village worked together in accomplishing the work. The pit privy was constructed with very simple materials, available to everyone, and cost less than three pounds including the slab. By the time the team left the village four latrines had been constructed. The team left a frame for casting the slab and other useful equipment to the villagers who proposed to construct their own latrines.

The tackling of this problem was an exciting experience which proved to us that by proper approach we may solve problems considered as " chronic " or insoluble.

In Benina no such approach was made. The cultural factor was ignored; the team brought its equipment and walked through the village trying to choose the best location in which to dig the latrine. As a result, the people did not allow the team to dig in their village, and instead of a latrine, bad relations were built.

The second feature of the people's culture which affected the programme is their extreme interest in children. Regardless of the high infant mortality rate, children born in that part of the world are really happy as they receive abundant love and affection from their parents. As the child grows, the parents' pride increases, and when the child reaches adulthood, the father is always willing to delegate gradually his rights as the dominant member of family to his eldest son. This gives pleasure and satisfaction to the father who feels that he is preparing his son to take his place at the head of the family. So by the time the father reaches old age he has given up most of his rights and consequently is no longer the man with the real influence in the family or the society. The eldest son becomes the most important person. It is very important that community workers, including health workers, be aware of this system of authority which is a part of the culture as it enables them to understand the positions of leadership and to detect the leaders who have real influence in the community. In such a community, those who deal with children — school teachers, for example — are brought immediately to positions of leadership in community matters. The eldest sons in the big families are the key people in running community affairs. Ignoring them and the religious leaders means ultimate failure for any community programme. However, in Gawarsha, the team was able to detect the natural leaders and to work with and through them.

In Benina, the team failed to understand the complexities of the culture including the system of authority and prestige. On the day of arrival in the village, the team leader sent out an invitation to all elders, roughly above 55 years of age, to attend a meeting to discuss the health conditions in the village. I use the word " discuss " in a non-scientific way, because in fact he just wanted to explain *his* programme to them. Apart from this, he made a definite mistake by assuming that these people were the leaders of the village. He knew that such persons were respected in their community, but he did not realise that this respect was due to sympathy, which has its roots in the people's religion. The school teachers were all younger than 55 and so they were not invited. The religious leader was not there either. The failure to detect the true leaders in Benina led to the failure of the whole programme.

What lessons have we learned ?

To us, this experience was very exciting, especially since it was the first of its kind, and we learned numerous lessons. But let me briefly put down a few major conclusions which were of particular interest to us at that time.

Policy

In planning this programme, much time was spent on what I might call " programme policy " : Who should undertake this phase of training? How much money should be allocated to it? Who will be the team leaders? Which villages should be chosen for this field work? How can we coordinate with the local authorities?... and such things were fully and repeatedly discussed. Practically no time, however, was spent on studying the people who

were to be affected by the programme. Later we learned that if we had spent on studying the people themselves at least as much time as we spent on programme policy the whole situation would have changed and we might have doubled our chances of success.

Problems or people?

The second lesson we learned is allied to the first one and is very important to students of public health. Our scientific knowledge about health—no matter how great it might be—will not always help to solve the health problems of the people. When we speak in terms of *public* health we realise that we know too much about health! In fact, there is a wide gap between our knowledge of *health* and our knowledge of the *public*, and this wide gap accounts for most of our failures in modern public health practice. If we want to be more successful we should bridge this gap. It is encouraging however to note that in the training of health workers today, the study of psychology and social anthropology has been recognised as necessary as the study of bacteriology and epidemiology.

Public health today no longer depends on what we—as health specialists—can do for the people. It depends on what the people can do for themselves. Therefore in the expression *public health*, the public, or the people, are the more important part. In most programmes, our knowledge should be greatest in the area that matters least and vice-versa.

This rather stange phenomenon creates a difficult situation for health workers. It leads us to adopt an "engineering" approach like the one followed in Benina village. It makes us problem-minded workers, concentrating on bare problems. It is true that we initiate and carry out public health programmes in order to solve health *problems*, but we have to remember all the time that we are not dealing with problems as problems, but with the *people* who have these problems.

Partly scientists and partly artists

Some health workers think that it is their job to solve the people's health problems. In fact we only say this for reasons of convenience, because it is the people who solve their own problems. In order to solve their problems, however, they must be made aware of them and must be motivated to work on them. In this, they need help, direction and technical assistance. We are there to give this technical assistance. In other words we are there to help the people solve their problems but we are not there to act on their behalf and solve their problems for them. It should come through their own efforts. Therefore, in any public health programme, people are the more important factor. It is not the physician, nor the nurse, nor the health inspector, nor the health educator, nor even all the health specialists combined. It is *the people*. And because the people are the more important, the study of the people, their conditions, their interests, their resources, their modes of living, their culture, must claim much of our attention when we plan for public health.

We should be able to link our knowledge of health matters and our knowledge of the people concerned. We must have the ability to transform our health knowledge into daily habits, practices and attitudes. In this way we make it meaningful to their life. This is not easy to do because it is an art. It cannot be done through some sort of scientific formulae like chemical formulae; and after all we are not wholly scientists. We

are partly scientists and partly artists, and the major aspect of our art is our ability to forge a link between health and the public.

One can talk for ever about the philosophy of public health. I am trying only to present the basic principle in which our students believed, and which our experience confirmed.

Leadership is complex

The third lesson we learned concerned community leadership. In the less elaborate societies, the system of prestige and authority brings forward few people only to positions of leadership. In complex societies, where there are hundreds of groups of interests, professionalism plays a significant part in determining leadership. This is not so in simple societies. Here, the systems of prestige and authority play the major role. These systems are of course a part and parcel of the people's culture and unless we understand them, we may not be able to detect the real leaders.

However, to detect the true leaders does not end the story. This is only the first step. Naturally, the next step is to study the relations between the different leaders of the community. It happened that in Benina the leaders were not on good terms with each other and there were disputes between two big families. When both leaders were called to the meeting at one time their hostile relations made a successful discussion almost impossible. Leaders can give a strong impetus for or against any community work, and particularly in simple societies the relationships of the leaders is a very delicate matter. We learned how important it is to detect the true leaders and then study their relationships.

We still have to consider the matter of developing this local leadership, particularly if we intend to stay for a long time or to work on a permanent basis in the locality. The techniques of developing community leadership are beyond the limits of this discussion—yet it is an important point to consider.

Sincerity : intentions versus words

The fourth lesson we learned from this experience was sincerity. We realise that technical knowledge is important for the professional worker, but we should not forget that the ethical code of the profession is not less important. We are sincere and we have sincere intentions. Yet, sometimes we go out to people and speak insincerely, without perhaps being conscious of it. The team leader in Benina told the people that the team came to improve their conditions and make their life far happier. He tried to stimulate people's interest this way, and no doubt that he was sincere in his intentions but his words lacked sincerity, and his sincerity was not translated into practice.

The team leader at Gawarsha told the people that the team came to their village to study the conditions, and if the people were ready to do something to improve their conditions, the team would help. Sincerity, to the health worker, means that he is honest with himself and honest with the people.

The real team spirit

The last major lesson we learned was a lesson in " team work ". Our golden principle in public health is " to work as a team ". We have repeated this phrase so often that it has lost much of its meaning. Team work is not the " traditional diplomatic negotiations " method; nor is it the majority versus the minority. Team work is a spirit; the spirit in team work is much more important than the structure.

In Benina, when the villagers were invited to the meeting they stood on one side and the group of students stood on the other, and each side began struggling for different goals. In Gawarsha, the students and the village leaders formed one team which struggled for one common goal. The students did many wonderful things but no one sought credit for himself. Each tried to give credit to other colleagues and to the village leaders, and we felt that we had given the students proper training in team work.

In short, this is the story of that pioneer work, which was intended mainly to serve training purposes but served also as a pilot project. It taught many lessons and all those who were involved learned a great deal both from the success and from the failures.

Mobile information unit for use in cancer education project

This vehicle, probably the first of its kind in Europe, went into service at the end of June as the latest extension to the work of the Manchester Committee on Cancer. The Committee has for some years been engaged in a programme of public education designed to change the prevailing climate of fear that surrounds the disease and to stress the value of early treatment, as reported in the January 1959 issue, pp. 8-13, of the " International Journal of Health Education ".

Doctors on its panel of speakers have given 1800 lectures to local organizations, but there has for sometime been an obvious need for some means of bringing reliable information to those people who belong to no club or association. It is hoped that this new mobile information unit will provide the answer. A nurse/lecturer will be in charge, and she will co-operate with business and industry in arranging talks or film-shows to people at their places of work. She will also take the unit to agricultural shows and other public exhibitions.

The vehicle is equipped with cine-projector, collapsible screen, films and other visual aids, and literature. The most encouraging feature of this new project is that it is a token of the public's enthusiasm for the Committee's work. The vehicle and all its equipment were the gift of Rotary International, District No. 105, and the whole project is being financed for two years at least by an independent organization active in the region, the Christie Hospital and Holt Radium Institute Women's Trust Fund.

A wide variety of publicty media are at the disposal of health workers. Which are the most effective in a given area for a given project? It is indispensible to confirm "feelings"—or contradict them—by statistics and facts patiently uncovered through carefully conducted surveys.

The value of various forms of publicity

by J. M. H. Hopper

One of the main vehicles of health education in an English town is the use of advertising in its various forms.

Because of this it was thought useful to try and evaluate which were the more efficient forms of advertising and so make use of them at the expense of the less efficient. The result of the investigations is applicable only to the area in which they were carried out. Different conditions in different areas will alter the relative value of these methods. This paper has been written to suggest that each area should try to analyse the value and effectiveness of the various forms of health publicity it uses.

It was decided that one way of evaluating health publicity was to use all the usual forms of advertising to publicise the coming of the mass X-ray unit, and then to question those people attending the sessions open to the general public, to discover by what form of publicity they had noted the visit. Each day of the week dealt with a different category of persons, so the advertising material had to be read and understood if the person was to get to the right place at the right time to take part in the questionnaire and then be X-rayed.

Forms of publicity used

(A) *General publicity*

1. Bus posters—consisted of two types, one issued by the Chest and Heart Association measuring 10″ × 7½″ which stated "Visit the Mass Miniature Radiography Unit in this area", the other, measuring 15″ × 5″, gave a map of the area where the

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After qualifying as a medical doctor, J. M. H. Hopper spent two years on the staff of a surgical department in a teaching hospital, and a further two years working in Ghana and Nigeria. After a short spell of travelling in South East Asia, he returned to a family practice in England. Since then, he has spent three years as Deputy Medical Officer of Health in Rotherham, a heavy industrial town of 85,000 people, and is at present Senior Medical Officer for School Health in Northumberland, a mining, fishing, and agricultural county with population of almost half a million.

His hobbies are playing with his young family, golf and bridge.

X-ray unit was sited and the times of the public sessions. Single deck buses displayed one of each type of poster and double deck buses two of each type of poster.

2. Shop posters. These measured 20″ × 16″ and showed a picture of the X-ray unit, a map of the area where the unit was sited and times of public sessions. These were supplied to all the major shops and most of the minor shops in the town.

3. Shops in prominent positions in the town displayed posters supplied by the Chest and Heart Association. These measured 15″ × 10″ and were fixed onto an easel 24″ × 20″, which was placed in the shop window or show case.

4. Works and business premises were supplied with the same type of posters as group (2).

5. Hoarding posters, 10ft × 5ft which stated in large letters that " Spring time is X-ray time ", and below in smaller letters, the appointment times for public sessions and the location of the X-ray unit. Six such posters were distributed on hoardings in prominent positions throughout the centre of the town.

6. Weekly advertisements appeared in the local press giving times and place of the X-ray public sessions for the coming week. They also included pictures of the unit in action and a report of an interview on this subject with the Medical Officer of Health.

7. Times and place of the unit were announced across the loud hailer at the football ground on two occasions during the visit of the X-ray unit.

8. The six cinemas in the town showed slides which advertised the times of public sessions, and the place of the X-ray unit. This occurred, nightly for the first fortnight of the campaign.

9. The three leading cinemas showed a Chest and Heart Association film " Also coming shortly ", three weeks, two weeks and one week prior to the coming of the X-ray unit.

10. Road signs were put up at the major road junctions in the town directing the public to the X-ray unit.

11. A small publicity and enquiry unit marked the entrance to the building where the X-ray was held.

(B) *Personal publicity*

12. The Medical Officer of Health sent a letter to about 200 parents of mantoux positive children asking the parents to attend.

13. The Medical Officer of Health sent a letter to about 40 people living in overcrowded conditions noted by the health visitors as likely to be " tuberculogenic ", explaining why they should attend for X-ray.

14. The Medical Officer of Health sent letters to all General Practitioners informing them of the visit of the X-ray unit and enclosed a poster of the type described in group (2). As a result, people attended at the public session on the verbal advice of their doctor, and others attended at special appointment sessions with a written note from their doctor. This last group was not included in this particular survey.

15. Hand-outs in the form of a letter from the Medical Officer of Health were distributed to food handlers and shopkeepers when they were visited by the Public Health Inspector. This letter informed them of an increasing need to guard against chest disease and advised attendance at the X-ray centre.

16. The Home Help Organiser asked home helps to encourage old people whom they visited and who were complaining of chest symptoms to attend for an X-ray.

17. The Welfare Officer publicised verbally the presence of the X-ray unit to old people in the Local Authority Homes.

A non-commercial news announcement over the radio a week before the campaign commenced was asked for but was not granted. The television medium was considered but was not used because of high cost and lack of a programme specific only to the area of the X-ray campaign.

The results

In all the forms of publicity the advice offered to the public was " attend for X-ray and make sure you have no chest disease ". The word " tuberculosis " rarely appeared.

As a result of this, any form of chest disease detected by the Medical Director of the Mass Miniature Radiography Unit was used to evaluate the efficiency in case finding of these forms of publicity.

Of the 4,736 people attending open sessions 4,418 were asked individually " what drew your attention to the presence and times of the X-ray unit in this town "? The answers are set out below :

What drew people to the X-ray unit

Attention drawn to presence of unit by :	No. of people attending	Percentage of total
1. Bus posters	1,067	24.
2. Shop posters	154	3.4
3. Window advertisements	31	0.7
4. Posters in works and businesses	602	14
5. Hoardings	500	11
6. Press	1,172	27
7. Announcement on the football field	7	2
8. Cinema slides	67	
9. Cinema films	14	
10. Road signs directing to Mass Miniature Radiography Unit	4	0.08
11. Enquiries at the Mass Miniature Radiography Centre	33	0.7
12. M.O.H's letter to about 200 parents of positive Mantoux reactor school children	62	1.8
13. M.O.H's letter through health visitors to people living in overcrowded conditions	18	
14. Verbal advice from General Pracitioners	150	3.38
15. Hand-outs from Public Healt Inspectors	4	0.08
16. Encouragement by home helps to attend because of chest symptoms	6	0.12
17. Living in Old People's Homes	35	0.74
18. Other reasons (parents, friends, etc.)	492	11
Total	4,418	100.%

The total number of people reached during the mass X-ray campaign was actually double the number attending public sessions and included :

(1) People attending by appointment during working hours from business and industrial concerns in the town;

(2) School children attending by appointment during school hours;

(3) Patients sent by their family doctor with a written request for an X-ray.

As these people attended by pre-arranged appointment they were not included in the questionnaire. The comparison between these various groups and those attending at the open sessions are set out below.

Results of the full mass X-ray campaign in 1957

	No. of people attending
People attending at public sessions	4,736
People attending by appointment during working hours	2,020
School children attending during school hours . . .	1,309
People sent with a written request for an X-ray by their family doctor	259
Total	8,324

Press and posters head the list

Since it was not possible to determine the number of persons reached by each publicity medium, the figures quoted on page 145 cannot claim to establish comparisons between the efficacity of these media. It is interesting to note, however, that the results seemed to indicate a marked superiority of the local press and bus posters as vehicles for health publicity. Indeed, 75 per cent of those attending stated that the advertisements in the press, bus posters, hoardings, or posters at their place of work, had drawn their attention to the presence and times of the X-ray unit in the town, whereas only 2 per cent were attracted by slides and film advertisements in the cinema and announcements on the football field. It is realized that more people were exposed to the former type of advertising, but at the same time the survey does tend to suggest that advertising during entertainment did not impress itself upon onlookers as much as it did in the press and on posters.

Comparative results of the 1957, 1958 and 1959 mass X-ray campaigns

	1957	1958	1959
Total attendances for all groups	8,324	6,917	7,888
Attendances at the public sessions	4,701	4,806	5,360
Rate of attendances per hour at the public sessions	130	120	120

Unexpected findings

It was accordingly decided to use the results of the 1957 survey in the 1958 and 1959 mass X-ray campaigns. The press, bus posters, and posters in works and businesses which had produced the greatest number of attendances and cases in 1957, were the three forms of publicity used. In addition it was thought desirable to send letters to parents of tuberculin positive thirteen-year-old school children, asking them and their children to attend for an X-ray.

The table set out below gives the results of the 1957 mass X-ray campaign where many forms of publicity were used and by comparison the 1958 and 1959 figures, where only selected forms were used.

The results show:

1. A fall in the total attendances for all groups in 1958 and 1959.
2. An increase in the total number of people attending at the public sessions in 1958 and 1959.

There were several factors in the 1957 campaign which were altered in 1958 and 1959. In the first place, the premises in which the X-ray examination had been held in previous years were not available in 1958 and 1959, but alternative accommodation was found nearer the centre of the town. Secondly, in 1958 and 1959, it was deliberate policy to encourage attendance of the groups who produced a greater case finding rate, so more time was given for public sessions at the expense of the other groups.

Conclusion

As a result of the 1957 survey, the three forms of publicity which had attracted the greatest number of attenders, together with a letter to the parents of tuberculin positive school children, were the only forms of publicity used in the 1958 and 1959 X-ray campaigns.

In comparing the results of the earlier campaign with the two more recent ones it was borne in mind that several factors had not remained constant throughout.

This survey agrees with the statement that the best way of publicising health problems is to use all forms available, as when the four selected forms of publicity were used, attendance dropped to 88 per cent of the total attendance when the sixteen forms listed in Table I were used.

It also shows that some forms of publicity attract the attention of far greater numbers of people. Prominence and priority should be given to these forms of publicity in future campaigns.

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1. Health Education. Ministry of Education pamphlet 31.
2. Ministry of Health Circular H.M. (57) 94. Development of the M.M.R. service.
3. Community Aspects of a Mass Radiography Campaign, Ann Cartwright, F. M. Martin & J. G. Thomson, *The Medical Officer*, 5th June 1959.

I would like to express thanks to Miss E. Keeton and Mrs. M. G. Boyd for helping in the survey and to Dr. R. J. Donaldson for advice and permission to publish this article. Above all I would like to thank Dr. W. J. Wilson, Medical Director, and Mr. F. L. Stanley, Secretary, of the Sheffield Mass Radiography Unit, for their very close co-operation and for supplying me with the results of the X-ray campaigns in the past.

A love of the theatre and of fantasy exists in all human hearts. Why not use it for the benefit of better health ? This is precisely what is being done by one of USSR's Health Education Centres, where regular theatre matinées have become the highlight of school health education.

The theatre—an ally of health education

by L. Sakvarélidzé

In Georgia, as in the other USSR federal republics, health education has taken a great leap forward. Great attention is being given in particular to health education for the future generations.

The theatre of the Health House in the town of Tbilissi has won the affection of the town's children and adolescents. A theatre serving health, it was founded in 1921 by a small group of enthusiasts under the leadership of a doctor. Following efforts to find its true purpose, it became a real theatre, attached to the Tbilissi Health Education House, with its own high quality artistic repertoire, designed to meet the needs of health propaganda. The theatre very quickly won its audiences' interest.

The Tbilissi Health Education House often organizes matinées for school children, with programmes on health subjects. These performances make a big impression on the children. In the theatre foyer various health materials, produced by the children themselves, are on display : wall newspapers, posters, slogans and drawings. A special committee of health educators, teachers and parents visits the exhibition to judge the displays and award prizes.

The theatre is in constant touch with the school children and the performances draw the children's attention to important health problems and the prevention of disease.

Generally two or three schools (about 200-300 people) come to a matinée. Towards midday orderly groups of school children accompanied by teachers and parents make their way to the theatre. At the head of each class is a young « health soldier ». The children invade the theatre's foyer and auditorium and chatter with the doctors who give them any necessary explanations on the material displayed.

When a bell is rung the children troop into the auditorium where, on a large

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table, there are books, crayons, pens, pieces of soap and combs. The children know these are the awards. Who will get them? This is the exciting question. They all want to win, but this isn't as easy as all that : the competition is tough...

The lecturer then walks in and silence is reestablished. In front of him he has an alert audience whose reactions are immediate. Actually, they are hardly interested in a talk—they have come to see a performance !

However, when the curtain rises, the children listen with acute interest. This attention is easily explained : they know that after the talk questions will be asked and an answer expected on the spot. One must be ready to defend the honour of one's school.

This competition enables to evaluate the school children's health knowledge. Note is made of the less advanced schools and later, appropriate measures are taken to fill the gaps which have been revealed.

The performance then begins. In front of the children, a moving representation unfolds—showing the Soviet battle against the impenetrable marshes, the natural « incubators » for malaria. Where there were fetid marshes, today citrus fruits grow. In the villages where previously everyone suffered from malaria and where man's life depended on healers, today there are huge hospitals and polyclinics, whose staff fight heroically against this curse.

Here is the plot of another play: N. had « flu » with all its symptoms—a cold, a cough and a temperature. However he wouldn't listen to his doctor nor to his family who begged him to stay in bed. He just laughed at them. He didn't realize that his illness was catching. He continued to go to work, to the sports stadium and to play chess with a friend. No one took any notice of his illness. But soon the sad consequences became apparent : nearly all his family fell ill, as did the son of his friend with whom he played chess. The little boy became seriously ill and only the doctors' efforts snatched him from the jaws of death. Then only, N. realized his crime.

Similar plays convince the school children that all illnesses can be combatted and supply material for discussion in the intervals. These discussions enable the doctors to evaluate the children's level of health knowledge and provide a basis for the planning of the activities of the Health Education House for the health education of school children.

Do you know the answer ?

Quizzes, with rewards for the winners, are enjoying a tremendous popularity in Poland and have become the entertainment of artistic, radio and TV programmes.

Recently, on the occasion of the 75th anniversary of the Polish Red Cross a special quiz on health was organised—" Do you know the answer? "—more particularly aimed at schoolchildren. Questions included " What does BCG mean?—How can one avoid fatigue?—What are the microorganisms which provoke sickness? " etc. Twenty-four of the competitors reached the finals, including seven with the same number of points. The first prize was finally won by a young boy.

The Polish Health Education Committee concludes : " This ingenious idea can be recommended as an effective means of promoting health knowledge."

In rural areas:

by Anna Kovárová

Our institute has established over the past five years a tradition of collaboration between health workers and film technicians for the production of health education films as well as the selection and dubbing of foreign ones. During this period, we have produced a series of film on basic health education subjects and developed a methodical collaboration with several Czechoslovak Film Studios.

Many of our health education films have met with success, both at home and abroad. We are aware of the fact, however, that we also have films of lesser and even of inferior quality but we are only too willing to listen to words of criticism. In this connection, we encounter among health workers a striking diversity of opinion concerning the suitability, the appeal and the educational value of our films. This is the main reason why we are trying to achieve an objective evaluation. We have set ourselves the task of obtaining, within three years, information about the effectiveness and appeal of the main types of health education films among the most representative groups of the population.

The final aim of our research is to collect facts and opinions which can serve towards the improvement of our health education films from the point of view of content, methods and presentation, and at the same time provide suggestions for a more efficient utilization as well as more economic production.

In 1958, we undertook a survey to compare the effectiveness and appeal of health education documentaries and feature films in a rural area. We used five films. This opinion survey was carried out in 13 communities of the Prague region, mostly in village cinemas, before the beginning of the evening programme, or sometimes in state farms, during lunch-time at the canteen.

Data was obtained by group questioning with the help of a two-page questionnaire. Each spectator was asked to evaluate two films, one of which was always a documentary and the other a feature. We were thus able to study the appeal of each individual film as well as the opinion of the public on its accuracy, interest, usefulness and educational value. We also tried to ascertain what the spectator

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Anna Kovářová was born in Prague. After graduating in medecine at Charles' University in the Czechoslovak capital, she specialised in ophthalmology and worked in this field for 25 years. In 1953, she became keenly interested in health education and devoted full time to this new field of activity. In 1956, she specialised in the methodology of health education.

Dr. Kovářová has been working for five years at the Prague Health Education Institute as Senior « Methodologist » for health education publications and films. She teaches to doctors and nurses and also takes a leading part in research work on the effectiveness of films.

Dr. Kovářová shares with her husband a deep interest in art and enjoys visiting museums, historical monuments, etc. To broaden her knowledge in this field, she recently took a university course on art. Thus, her hobby is of great help in her daily work—that of linking health education and art.

ıs : documentaries or feature films ?

The Prague Institute of Health Education is now better equipped to produce the kind of films that will appeal most to rural populations and be the most effective—health education-wise. This is the result of a carefully conducted survey to collect opinions and facts on the educational value of documentary films *versus* feature films.

had actually retained from the film, and finally, whether he preferred the documentary film or the feature and which of these two types of films he would recommend that we use to develop suitable themes for rural areas.

We are aware of the fact that the group surveyed was more representative of the regular audience of village cinemas than of the rural population as a whole. The group included a total of 730 spectators. There was an almost equal number of men and women. The largest group was the age group 20-39 which formed half of the spectators. Approximately every fifth spectator belonged to the teenage group.

The evaluation of the individual films (Table 1) showed that nearly all the spectators liked the films. They expressed more favourable opinions on the feature films than on the documentaries. In response to the question : « Compare both films and indicate which you like best », more than 50 per cent of the spectators expressed an equal liking for both. Among the other half, however, twice as many spectators voted in favour of the feature films. Approximately the same number of persons stated that both types of films were equally accurate and interesting while a slightly higher number felt that the documentary films were more effective.

TABLE 1

How were the films liked?

Evaluation of individual films			Comparison between the two sets of films	
	Documentary	Feature		
	%	%		%
Very much appreciated . .	50	60	Documentary film preferred	14
Appreciated	43	33	Feature film preferred . . .	30
Some parts yes, some parts no	7	5	Liked both equally	56
Disliked	0	1		
Without comment	—	1		

TABLE 2

Audience opinion on the educational value of the films

Evaluation of individual films			Comparison between the two sets of films	
	Documentary	Feature		
	%	%		%
Instructive	98	98	Documentary film more instructive	16
Not instructive	0	0	Feature film more instructive	17
Without comment	2	2	Both equally instructive . .	66
			Without comment	1

The opinion (Table 2) of spectators on the educational value of these films, whether taken individually or as sets of films, was equally favourable for both types.

We also undertook an objective assessment of the educational value of the films by trying to find out whether and to what extent the spectators had retained the main points presented in the films. The survey showed results nearly twice as high for the documentary films. As regards the feature films, it is interesting to note that 51 per cent of the spectators did not answer the question concerning what they had learned.

TABLE 3

Objective assessment of the educational value of the films

	Documentary	Feature
	%	%
Film show contributed to gaining of knowledge and decision to change behaviour	42	22
Other correct answers	17	23
No new information gained	3	4
Without comment	38	51

An unexpected result of these investigations was to show the influence of the films on the spectators' attitude towards health problems. Spontaneous decisions to do something about their own health and for the health of their family, or even of the whole community, were more often provoked by documentaries than by feature films. Documentary films inspired a decision in 14 per cent of the cases and feature films in 8 per cent.

To the question « Which type of film should be produced in the future for rural regions? » 36 per cent answered in favour of both types, while 45 per cent asked for feature films and only 19 per cent for documentary films.

We were also interested in knowing whether the spectators considered our films as works of art or as a means of education. The question « What did you like in this film and what did you dislike? » was answered mostly from the point of view of health information. (Table 4). When the spectators expressed an opinion on the artistic value of the film, they almost exclusively commented on their positive qualities; only 1 per cent mentioned their shortcomings.

Although the survey was carefully organized with the help of the district

TABLE 4

Did the spectators pay attention to the scenario or to health information?

	Documentary	Feature
	%	%
To the scenario	4	5
To health information	23	14
To both	8	3
Other answers	19	14
No reply	46	64

doctors, health education instructors and local authorities, there was always some loss of time, both for the public and the film operators. In spite of this, a negative attitude was never encountered. On the contrary, the public complained because such useful films were not shown more often. Later, the film operators from the villages asked for the results of the questionnaire in « their community ».

Our survey has shown however that although 76 per cent of the spectators from the group under study belonged to the regular audience of cinemas, only two of them remembered having seen one of the films before.

The study was completed by an inquiry among 16 health workers (15 of them with health education practice) and four film experts. Group questionning with the help of a questionnaire was used in the same manner as for the survey of the rural population.

Health workers were asked to assess the educational value, the impact on behaviour, the artistic level and the presumed reactions of the rural public. Film experts classified the films from the point of view of approach and artistic level. Opinions of health and film workers were sometimes diametrically opposed and often a film which had received the highest praise from health workers, received the lowest marks from their film colleagues. It is of interest to note that on this occasion, film experts showed a much better knowledge of the taste and demands of the rural public than doctors. This was evidenced by a comparison of their replies with the results of the survey among villagers.

Conclusion

This research represents only a part of the planned research programme. Nevertheless, since the problems involved were studied from different points of view, we feel justified in drawing some general conclusions which can be of practical value in improving our work in rural areas.

The public showed a preference for feature films. Yet, documentary films offer greater opportunities for broadening the health knowledge of the spectators. (We are of course aware of the fact that the survey does not show whether the effects persisted).

In addition, a documentary film usually costs only half the price of a feature film. Therefore, if documentary films succeeded in achieving the vividness and attractiveness demanded by the public, we could increase the effectiveness of our health education efforts and achieve substantial economy—or produce twice as many films. Together with film experts, we shall endeavour to reach this goal.

The rural population looks upon feature films as a means of information rather than a source of entertainment. In as

much as they note the artistic aspects, they comment on the positive ones without reacting to shortcomings. This means that we must produce films of the highest artistic standard for rural areas.

We have also gained valuable experience concerning the best use of health education films in these areas. We saw that rural audiences have such a lively interest in health education films that they are willing to sacrifice a part of their free time and personal comfort after a heavy days' work. Actually the lack of exploitation of this interest by health workers contrasts sharply with this finding. In 1957, 15,509 lectures with filmshows were given in Bohemia; in 1958, only 14,994. All cinemas, without exception, regularly receive printed information concerning new film productions. Health workers only need to inform managers of the rural cinemas and educational workers of the special value of health films.

Rural audiences spontaneously discuss health problems after having seen health films. Village cinemas can therefore become the best « auxiliaries » of health workers in their health education efforts.

For those of us who take an active part in the production of health education films, the results of this survey have brought us to pay still greater attention to methods of approach of the rural spectator so that health education films will gain from the ranks of the rural population as many active co-workers as possible for the cause of the high standard for health that we try to promote.

First Red Cross Seminar International

" The 1st Red Cross International Seminar on Health Education demonstrates clearly the great opportunities the Red Cross has in the promotion of health education " commented Dr. John Burton, Expert from the World Health Organization, on his return from the Seminar.

Delegates from 13 countries—Bulgaria, Ceylon, Ethiopia, the German Democratic Republic, Ghana, Greece, India, Iraq, Italy, Poland, United Arab Republic, United States and Yugoslavia—together with experts from the International Union for Health Education of the Public and the World Health Organization were guests of the Yugoslav Red Cross for the duration of the Seminar, which took place in Opatija from 22-29 May. The IUHEP representative was Prof. C. Vetere, of the Italian National Health Education Committee.

The Seminar, which was organized by the Yugoslav Red Cross in co-operation with the League of Red Cross Societies, covered the study of health education in rural areas, industry and Junior Red Cross. Highlights of the one-week session included visits to a village to see the activity of the Red Cross in improving health, to a factory where the Red Cross carries out a health education scheme, and to a school where participants saw a health centre and a Red Cross school kitchen. Stress was laid on the role of the Red Cross in spreading health education and the fact that Red Cross workers, after adequate training, can play a leading part in helping to convey health knowledge to the population.

The Seminar was under the direction of Dr. Olga Milosevic, Secretary General of the Yugoslav Red Cross and a member of the IUHEP Executive Committee.

panorama

Compulsory versus voluntary vaccination

There is no simple solution to this controversial problem. The decision whether to adopt compulsory or voluntary vaccination has to be made according to experience or opinion as to which would result in the most effective vaccination programme, and these vary greatly in different countries. However, the ultimate aim should be voluntary vaccination depending for its succes on the development of a spontaneous demand for vaccinaction by the population through health education both of the population at large and, especially important in some countries, the medical profession itself, which should, but often does not, play a leading role in stimulating a proper attitude to immunization.

The aim that vaccination programmes should become " the people's programme with government participation " rather than " the government's programme with people's participation " can only be achieved by a developmental process. Uneducated peoples with ideas and customs that have changed little in centuries cannot understand the achievements of modern medicine which are often directly contradictory to established religious beliefs or " fetishes ". Nor indeed are such attitudes confined to uneducated peoples. They can be found even in the most highly developed countries among certain groups which because of their fanaticism can do a great deal of harm if counter-propaganda is not adopted. In rapidly developing areas compulsory vaccination may be essential. As education improves, compulsion can be relaxed. However, for the success of all programmes it is essential to inform the populations with great care as to *how*, *when* and *where* the programmes are to take place and to explain *why* as the ability of the population to understand such explanations improves. Health education should be undertaken in all programmes whether compulsory or not.

Vaccination is not simply a personal affair. Indeed it is essentially a community matter since the objective of most vaccination programmes is to produce a herd immunity. The community thus has the right, should it so decide, to insist on its own protection, and when the community is not competent through ignorance to speak for itself its leaders must speak for it.

The decision to abandon compulsory powers is a step which should be taken with great care: removal of compulsion can rather easily be misunderstood by the population.

In the words of Dr Zhdanov of the USSR: "One thing seems indisputable, and that is the general tendency to attach greater importance to the role of the population itself in carrying out an immunization programme. The higher the level of the public's medical knowledge and health education, and the closer the contact between the health services and the public, the less necessary are all kinds of restrictive and compulsory measures."

(From report "A 13/Technical Discussions 15" p. 11, presented at the XIIIth World Health Assembly).

WHO and the IUHEP

The WHO world headquarters and the Regional Office for Europe are providing technical assistance to the IUHEP for the Seminar on Research convened in Rome, 2-8 October, by the Italian National Committee for Health Education and the Union. A Consultant from WHO headquarters will take part in the Seminar in the person of Dr. Mayhew Derryberry, Chief of Public Health Education Services, US Public Health Services, who is joining the WHO staff in Geneva, 18 September-19 October, to assist in the preparation and compilation of studies and research in health education. The support of the Regional Office for Europe has taken the form of travel grants to health education research experts from various European countries.

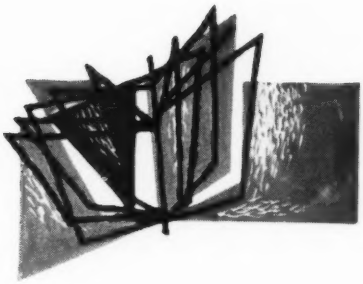
WHO and the Red Cross

Two international meetings were recently the occasion to establish closer relations between WHO and the Red Cross. One was the 1st Red Cross International Seminar on Health Education (see p. 154), at which Dr. John Burton represented WHO and spoke on "Diagnosis Before Treatment"—or the need, before launching a programme, to evaluate the knowledge and attitudes of the population. The second occasion was the 1st International Red Cross-Red Crescent Study Centre organised by the League of Red Cross Societies, near Geneva, 10-13 June, for Executive Officers of National Red Cross and Red Crescent Societies of the Near East, North and Equatorial Africa.

WHO and WCOTP

The Maternal and Child Health Unit and the Health Education Unit of WHO are actively co-operating with the World Confederation of Organizations of the Teaching Profession in promoting interest in "The Health of the School Child", theme chosen by WCOTP for 1960. The subject was discussed at a symposium during the Ninth Assembly of Delegates of WCOTP held in Amsterdam 31 July-7 August. WHO was represented at the Amsterdam meeting by Dr. Frank Mortara. For its part, the IUHEP had as observers Mr. Jean de Vreeze, Secretary General of the National Health Education Committee of The Netherlands, and Miss Elsa Schneider, Specialist, Health, Physical Education, Recreation and Safety, US Department of Health, Education and Welfare, and member of the American National Council for Health Education of the Public.

Books



Health Education in the School and in the Syllabus

A report on a meeting held jointly by the Italian Federation Against Tuberculosis, the Italian Ministry of Education and the Experimental Centre for Health Education, Perugia, Italy; 121 pp., 1960.

The title of this report is interesting in that it implies that there is a difference between health education in school and health education as a subject in the curriculum. This idea is elaborated in various contributions by Professor Giardini—Preventive Medicine and School Health; Professor Seppilli—Health Education; Professor Calò—School and Health; Professor Cottone—Health Education in the Curriculum; Professor Vetere—Health Education and the Preparation of Teachers; Professor Meschieri—The School's Contribution to Mental Health; and Dr. Modolo—Psychological Aspects of Health Education.

It is pointed out by the contributors to the lecture sessions that health has featured as an important background need of education from Platonic times onwards, and that now factors such as the school environment and the school health services, the relations between health staff and teachers are all important elements in the education of children in health. The study of health education as a classroom subject is a separate but intimately linked activity. The list of subjects suggested for classroom instruction can have little impact on the child's mind if the environment, both mental and physical, and the health services of the school do not back them up by a living example.

The study groups concluded that health education in school must be based on the following principles:

(1) The physical environment and functioning of the school are the basis of health education;

(2) Health protection in school must be developed throughout Italy and that the responsible health workers require special training for this work;

(3) Special attention should be paid to preparation in biological and psychological principles of those teachers charged with health education. The production of suitable textbooks should be undertaken.

(4) Collaboration between national and local health agencies and educational agencies is indispensable.

John BURTON

An Inventory of Social and Economic Research in Health

Health Information Foundation, 420 Lexington Ave. New York 17, N.Y. USA; 556 pages, 8th Edition, 1959.

Research is the source of growth and of understanding for every profession. For those engaged in the multitude of disciplines concerned with health, a considerable problem is presented in uniting the efforts being made to develop and consolidate new knowledge. This volume attempts to do so in the American scene. Its purpose is not to list past efforts but to present 841 current projects, of which 322 are listed for the first time.

The problems, the projects and any publications are listed with sufficient detail to enable

the interested enquirer to seek further information from the appropriate source.

The three sections cover studies related to health levels, behavioural aspects of health and health resources, and the economic aspect of health. Various appendices list financial sponsors, organizations conducting research, and personnel engaged. A subject index is effectively set out.

Those who are involved in national and regional leadership will find in this volume suggestions for their future endeavours, as well as material help in formulating current and future policies.

Positive Health of Older People

1960 National Health Forum Highlights, National Health Council, 1790 Broadway, New York 19, N.Y.; 20 pages, gratis

This mimeographed document contains a review of the work of the National Health Forum on positive health for older people. Some 600 people attended the three day forum. The " actions " suggested for the individual, for the health professions, for voluntary health and welfare agencies, for commerce and industry and for the government are presented in the five papers published here. Suggestions for the individual included " Well Older Person Clinics "; participants were not entirely agreed on the appropriate responsibilities, of industry, although these should clearly be wider than was sometimes the case at present. The action suggested for the health professions placed the development of new concepts in health education as a number one priority. Research in health education was also cited for action by voluntary health agencies, and in particular the discovery of more effective methods of public education.

This booklet contains ideas to stimulate all who care about " older people ".

Health at Work and Play—the Role of Health Education

A booklet in the series " Handbooks for Health Education Organizers " published by the Health Education Section of the Warsaw State Health Institute in 1959; edited by Mrs. Hanna Wentlandtowa; 56 pages, language: Polish.

This booklet contains chapters on " Basic knowledge of physiology and occupational health " by Dr. Jerzy Leowski; " Health and intellectual work " by Dr. Maria Jokel; " Health education and leisure time health " by Joanna Tolwinska; " Flannelgraphs—valuable aids for talks " by Maria Gurzkowska; " Occupational health in the home " by Irene Celejowa.

This booklet is intended for health education practioners and organizers. It contains many theoretical comments on the physiological processes which take place in the human organism during physical and intellectual work and gives practical guidance on mental health and the organization of leisure, the usefulness of sport and physical culture, sensible ways of achieving a balanced diet, the undesirable influence of drugs, etc. This advice is addressed to representatives of different professions, to school children and to housewives.

The booklet also contains a rich bibliography, including books, booklets, journals, films and filmstrips.

How to ensure well organized work and sensible relaxation are the problems of our time.

T. STEPNIEWSKI

Health Education Exhibitions

A booklet in the series " Handbooks for Health Education Organizers ", published by the Health Education Section of the Warsaw State Health Institute in 1959; edited by Mrs. Hanna Wentlandtowa; 72 pages, language: Polish.

The authors of this booklet discuss the part played by visual aids, displays and travelling exhibitions in the promotion of health knowledge on a large scale. They give practical advice for the arrangement of interesting exhibitions, so that these effectively reach the various groups and regions for which

they are intended. An important factor is a good layout, which should be attractive, yet not too complicated.

Colourful posters, paintings and drawings can be very effective as health education material—to show for example the benefits of clean air and general cleanliness. Educational posters can also be used to encourage early diagnosis and systematic examinations for case finding.

T. STEPNIEWSKI

Health Education Exhibitions
A One World Challenge

G. W. Anderson, American Journal of Public Health, 50 : 2 (Feb.) 1960.

Here are important points in a broad consideration of health education by an experienced public health administrator and dean of a school of public health.

Public health measures fall into the categories of regulation, service and education. No regulation can be enforced unless there is public acceptance of it. Fundamental to public health services is education for those who appropriate the money, education at the technical level for those who render the services, and education of the people to understand the nature of the services and avail themselves of the protection they offer. There are many types of health problems which " cannot be solved by regulation or by service but only through the understanding of the people as to the conduct of their personal lives ".

" As we discuss world health and recognize that we are dealing with one world, in which the health problems of one nation become the concern of others, we must build our programs fundamentally on education. Regulation alone will not suffice nor will expanded and lavish programs of service, for it is only through education that regulation will be accepted or service utilized. We are thus faced with a tremendous problem of health education which is the concern of each and every one of us."

Clair TURNER

Basic Needs in Health Education

Journal of Education, Boston University School of Education, Mass. USA; 78 pp.; $1.

The April, 1959, issue of the Journal of Education is given over to this topic, prepared by Prof. Leslie W. Irwin. From the standpoint of the United States it discusses needs, problems, the relation of health and safety education, the elementary school programme, the high school programme, and the health education of elementary school teachers. Studies showing limitations in the health knowledge of both students and teachers are reviewed.

Clair TURNER

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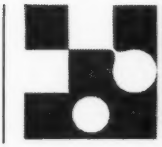

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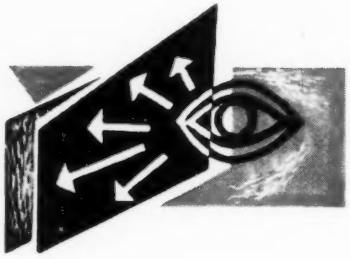

Community Mental Health

16-mm, black and white, sound (English) 30 min. $150. Mental Health Film Bureau, Inc. USA.

This film dramatizes one of the newest trends in the mental health field—the community-based mental health center which offers services far beyond the traditional treatment clinic. Psychiatry is moving toward the public health approach and is concerned with prevention and mental health promotion as well as treatment of disease. The film shows examples of the kind of preventive services a center might provide.

This film does not have a " story " in the conventional sense. Rather, it traces the process by which the community of Kent is able to provide itself with specialized services which can help to meet a variety of mental health needs. The " trigger " event which rouses the community is a particularly vicious juvenile crime perpetrated by a boy from a good family. A few concerned citizens ask for help from their State Community Mental Health Consultant on how to prevent this and other kinds of situations involving disturbed behavior. With his guidance, the Committee is able to get a broad cross-section of the community involved and after about two years of effort the Center becomes a reality.

The services of the Center—treatment, consultation to other community agencies and professional personnel and education of the public—is described in a series of dramatic episodes.

The Hidden Tear

16-mm, black and white, 16½ min. Sturgis-Grant Productions, Inc., NYC, USA.

The story of Debbie Mullins, an 8-year old asthmatic, who takes part in the Asthma Reconditioning Programme in Charleston, West Virginia. Showing how supervised gym activities, coordinated with good medical management, can give such children a healthy, optimistic outlook on life, the film indicates how simple it is for other communities to establish similiar programmes and enable people " to live with asthma ".

Audience: For adults who may be interested in community health programmes, for local " Y's " and similiar institutions, families of asthmatic children and for doctors (allergists) and medical people.

Purpose: To stimulate communities throughout the country to establish similiar programmes of rehabilitation for asthmatic children and for adults as well.

The Second Chance

16-mm, black and white, 28½ min. American Heart Association, Inc., NYC, USA.

Based on the case history of a 63-year old fireman, the film depicts " Pop " Rankin's battle for rehabilitation after he has been paralyzed by a stroke. It points out the benefits of beginning rehabilitation early and the roles of the family and doctor in meeting physical and emotional problems.

Audience: General public.

Purpose: To depict the physical and emotional problems in dealing with stroke patients at home.

From Generation to Generation

16-mm., colour, sound (English), 30 min. Maternity Center Association, NYC, USA.

" From Generation to Generation " tells with imagery and symbolism the universal

story of human reproduction. The film opens on the dawn of a spring day with views of the misty sea, the forest and the farm. Here we meet the farmer and his wife. We follow the seasons, observe the growth of crops. We see the mature season when the harvest is ripe. In counterpoint, we examine the locale of the story, the unfolding of new life. We study the ovum and sperm, the genes and chromosomes. We see how the baby is nourished and watch the baby reach maturity and is ready to be born. An animation sequence shows, in stylized form, the working of the muscles in labour and the birth of the baby. The film is more than a recital of physiological facts. It shows human reproduction as an integral part of nature. It makes clear that child-bearing is an emotional and spiritual experience as well as a physical one.

Audience: Prospective mothers.

Purpose: To help allay the anxieties of prospective mothers during pregnancy.

The Day Susie Lost her Smile

16-mm., colour, sound (English), 3 min. 40 sec. Bristol-Myers Production Division, NYC, USA

This is the story of a delightful little girl whose world crumbled when " Billy Blue-eyes " said, " Your smile disappeared. What happened to you? " The film tells how Susie not only got her smile back, but " Billy Blue-eyes " as well.

Audience: Primary school children and their parents, teachers and dentists.

Purpose: To teach proper toothbrush techniques; stress after-meal brushing, show the value of a smile; motivate discussion on dental health; entertainment.

The Owl and Fred Jones

16-mm., colour, sound (English). Equitable Life Assurance Society, NYC, USA. Bureau of Public Health, Medical Department.

This film deals helpfully with something that concerns every human being—habit. It shows effectivly that habits are what we make them—good or bad. It explains how to control our habits and make them serve us Using the example of over-eating, it lists specific steps to change a habit.

Audience: Adults, and youths of secondary school age.

Purpose: Those persons seeing the film should become more aware of the part that habit plays in their lives. If they have any habits they want to change, they should gain a better understanding of how to go about making such a change.

The six preceding films were reviewed by Mrs. A. JACOBY.

Do Your Daily Gym!

Black and white, sound (Polish), 10 min. Produced in Poland from a script by K. Baj.

This film has been produced with the collaboration of the Polish sportsmen E. Krezesinska and Z. Wazny. It encourages the performance of physical exercises every day to keep well and fit.

A well made film, capable of attracting the attention of young children, while being aimed at all ages.

The Battle against the Rats

Black and white, sound, (Polish) 25 min. Produced in Poland from a script by J. Nel and E. Maszewski.

The film shows various measures that can be taken in the battle against these rodents, describing the simplest methods for the destruction of rats and their fleas so as to avoid the transmission of contagious diseases.

Because of the role played by rats, their destruction is of great importance, from the community point of view specially. These rodents breed very prolificly. They can transmit such diseases as plague, typhus, etc. De-infestation is therefore a very serious community problem.

T. STEPNIEWSKI

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